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TWENTY-THIRD ANNUAL REPORT

RELATING TO THE REGISTRY AND RETURN OF

BIRTHS, MARRIAGES AND DEATHS
IN MICHIGAN

FOR THE YEAR 1889

BY THE

SECRETARY OF STATE

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STATE OF MICHIGAN.

DEPARTMENT OF STATE, }
OFFICE OF THE SECRETARY, }
June 16, 1891.

HON. EDWIN B. WINANS, *Governor of Michigan*:

SIR—In accordance with the requirements of the laws of this State, I have the honor to submit herewith the Twenty-third Annual Report of Births, Marriages and Deaths, as returned, for the year ending December 31, 1889.

The tables and exhibits contained in this volume are modeled after those in previous reports, and in the compilation and proving of the work much care has been taken to make them as perfect as possible. With every year the returns of the statistics to this office become more complete, thus making the work more accurate and valuable.

The census of the State, made in 1884, has been used as a basis for computing all rates and percentages. It was hoped that the United States census of Michigan for 1890 would be available, but the report could not be obtained in time, though that part of the work for which it was desired was held for some time. The estimates of population given in previous reports, since the year 1884, were found to be incorrect, as they were based upon the rate of increase in population between the years 1884 and 1880, and the same rate of increase has not prevailed since then as shown by the late census. As it is, the population for 1884 only is given.

It will be seen, notwithstanding the influenza epidemic, that the number of deaths returned for 1889 was less than for 1888, though it was more than for the ten years' average, as it should be, to correspond with the increase in population. The births and marriages, however, show an increase, which makes the excess of births over deaths larger than for the previous year. During the year 1889 there were in this State, according to the returns, 49,272 births, 18,300 marriages, and 20,315 deaths.

That the influence exerted by climate, water and other conditions of environment upon the health of the inhabitants may more plainly be seen, the statistics are given in divisions for different parts of the State, the sections having certain characteristics. These divisions will be found in Table 75.

The first part of this report gives a summary of the births, marriages and deaths, and the parts following treat of these subjects fully as to statistics, giving many different per cents, rates and comparisons, much attention being given to the deaths and the causes thereof.

Hoping that the work will prove of interest and value to sanitarians, officials and all interested in the subject, it is

Respectfully submitted,

A handwritten signature in cursive script, reading "Daniel Esape". The signature is written in dark ink and is positioned above the printed name.

Secretary of State.

BIRTHS, MARRIAGES AND DEATHS

IN MICHIGAN

DURING THE YEAR 1889.

The facts considered in the following pages of this report are concerning the rates of births, marriages and deaths to the population, the sex, age, nativity, seasons of the year and conditions of weather, in different parts of the State. These facts are compiled from the official reports to the Department of State from the county clerks.

In this State the enumeration of births and deaths is made and reported to the county clerks by the supervisors and assessors of townships and cities, except in Detroit, where the enumeration is made by persons appointed by the common council. The facts concerning marriages are reported to the county clerks by the ministers of the gospel and justices of the peace, who are authorized to solemnize marriages in Michigan. With every year these reports are becoming more complete, accurate and valuable.

Exhibit A gives at a glance the leading facts of the subjects treated of in the succeeding pages. It will be seen that there were returned for the year 1889, 49,272 births, 18,300 marriages and 20,315 deaths, a total registration of 87,887, being 101 less than the number returned for 1888. While the marriages and births have increased about as usual, the deaths have fallen off, thus making the excess of births over deaths greater than ever before.

EXHIBIT A.—*Births, Marriages and Deaths, returned as having occurred in Michigan during each of the Years 1886 to 1889, and the Average for Ten Years, 1879-1888, as returned and corrected for omissions in the enumeration.*

		1886.	1887.	1888.	1889.	Average 10 years 1879-1888,
As returned.	Marriages *.....	17,179	17,294	17,294	18,300	16,129
	Births.....	41,095	46,226	48,952	49,272	41,389
	Deaths.....	18,187	19,482	21,764	20,315	17,721
	Excess of births over deaths.....	22,908	26,744	27,188	28,957	23,668
As cor- rected for omissions.	Births.....	60,484	58,493	60,120	65,224	54,888
	Deaths.....	25,210	27,251	26,043	27,461	25,151
	Excess of births over deaths.....	35,274	31,242	34,077	37,763	29,737

* Corrected for additional returns up to April 19, 1890.

VITAL STATISTICS OF MICHIGAN, 1889.

The census of Michigan for 1884 gave a population of 1,853,658. Based upon these figures, the birth-rate, marriage-rate and death-rate, as represented by the returns of 1889, were as follows:

Birth-rate	26.72 to 1,000
Marriage-rate	9.87 to 1,000
Persons married	19.74 to 1,000
Death-rate	10.99 to 1,000

The relations which the births, marriages and deaths sustain to each other, as well as to the inhabitants of the State, may be seen in Exhibit B. The natural daily increase of population in 1889 was 79, five more than in the previous year. By the returns and the population of 1884, one child was born in 1889, to every 37 persons, one marriage was solemnized to every 101 persons, and one death occurred to every 91 persons.

EXHIBIT B.—Statements concerning Births, Marriages and Deaths in Michigan during the years 1885–1889, inclusive.

	1885. ^a	1886. ^a	1887. ^a	1888. ^a	1889. ^a
Inhabitants represented by returns of marriages to one marriage.....	b 111.28	107.90	107.19	107.12	101.29
In population represented by marriages, males to one marriage.....	58.50	56.72	56.34	56.31	53.24
In population represented by marriages, females to one marriage.....	52.77	51.17	50.83	50.80	48.03
Inhabitants represented by births to each child returned.....	48.96	44.98	39.94	37.74	37.42
Inhabitants, males, to each male child returned.....	44.86	45.54	40.37	38.02	37.78
Inhabitants, females, to each female child returned.....	48.11	44.51	39.58	37.45	37.10
Inhabitants represented by deaths to one death.....	110.90	101.61	94.79	84.81	90.91
Inhabitants, males, to one death of male.....	107.50	99.87	91.86	82.78	88.34
Inhabitants, females, to one death of female.....	115.68	104.34	98.70	87.87	94.25
Deaths, males to 100 females.....	119.24	115.75	119.00	117.00	118.00
Births, males to 100 females.....	106.50	108.28	109.00	109.00	108.73
Total population of State, males to 100 females.....	110.55	110.85	110.85	111.00	110.78
Births to one death.....	2.53	2.26	2.37	2.25	2.43
Births, males, to one death of male.....	2.40	2.19	2.27	2.18	2.33
Births, female, to one death of female.....	2.69	2.34	2.49	2.33	2.53
Children born of which the sex was unknown or not stated.....	63.00	63.00	70.00	25.00	48.00
Decedents of which the sex was unknown or not stated.....	52.00	60.00	42.00	18.00	34.00
Natural daily increase of population, as per births and deaths returned.....	69.00	63.00	73.00	74.00	79.33
Natural daily increase of population where returns of births and deaths are corrected for omissions in the enumeration.....	97.00	97.00	86.00	94.00	100.72

^a In computing statements for this column the population of 1884 was used.

^b Marriages corrected for additional returns up to April 19, 1890.

The following statistics, taken from the registration report of Massachusetts for 1889, show the rates of births, marriages and deaths in various states and countries.

BIRTHS, MARRIAGES AND DEATHS.

3

Rates of Births, Marriages and Deaths in various States and Countries for the Years 1887 and 1888.

States and countries.	1887.				1888.			
	Birth-rate.	Death-rate.	Excess of birth-rate over death-rate.	Marriage-rate.	Birth-rate.	Death-rate.	Excess of birth-rate over death-rate.	Marriage-rate.
Massachusetts	26.4	20.3	6.2	19.4	29.9 a 26.2	19.9 a 19.2	6.0 a 7.0	18.6 a 18.7
New Hampshire	19.9	18.7	1.2	20.1	18.6	19.7	1.1	19.5
Rhode Island	24.2	19.9	4.3	18.0	24.3	20.4	3.9	18.7
Austria	33.2	23.9	9.3	15.6	37.9	29.2	8.7	15.8
Belgium	29.4	19.3	10.1	14.2	29.1	20.1	9.0	14.7
Denmark	32.0	18.3	13.7	14.0	31.7	19.7	12.0	14.2
England and Wales	34.4	18.8	12.6	14.2	30.6	17.8	12.8	14.2
France	23.5	22.0	1.5	14.6	23.1	21.8	1.3	14.4
German Empire	36.9	24.2	12.7	15.6	36.7	23.8	12.9	15.7
Hungary	43.9	33.5	10.4	17.9				
Ireland	23.2	18.3	4.9	8.7	22.9	18.0	4.9	8.4
Italy	33.3	27.7	10.6	15.5	36.6	26.8	9.8	15.6
Netherlands	33.7	19.7	14.0	14.0	33.7	20.4	13.3	13.8
Norway	30.8	16.0	14.8	12.5	30.8	16.9	13.9	12.3
Prussia	37.8	23.9	13.9	16.0	37.7	23.0	14.7	16.1
Scotland	31.2	18.7	12.5	12.5	30.5	17.6	12.9	12.5
Sweden	29.7	16.1	13.6	12.5				
Switzerland	27.9	20.2	7.7	14.2	27.7	19.9	7.8	14.1

a 1889.

Exhibit C gives the number of marriages, births and deaths for the last 21 years, from 1869 to 1889, inclusive, as they were returned to the Department of State. The total of each for the 21 years, and the average year can be seen at the bottom of the table.

VITAL STATISTICS OF MICHIGAN, 1889.

EXHIBIT C.—*The Number of Births, Marriages, Deaths and Excess of Births over Deaths, as returned for each of the Years 1869–1889.*

Years.	Births.	Marriages.	Deaths.	Excess of births over deaths.
1869.....	27,098	8,459	9,145	17,948
1870.....	26,663	9,160	10,766	15,897
1871.....	25,992	10,181	9,728	16,264
1872.....	27,993	9,882	13,371	14,622
1873.....	34,608	10,574	14,258	20,350
1874.....	31,151	11,041	12,500	18,651
1875.....	31,958	11,055	11,990	19,968
1876.....	34,235	10,858	12,576	21,659
1877.....	33,895	11,009	12,919	20,476
1878.....	35,162	12,221	12,766	22,896
1879.....	34,122	13,225	14,407	19,715
1880.....	35,323	14,149	16,102	19,221
1881.....	34,749	14,847	19,238	15,511
1882.....	37,026	16,178	16,425	20,601
1883.....	40,809	16,420	16,906	23,903
1884.....	40,408	15,002	18,056	22,352
1885.....	42,119	15,016	16,646	25,473
1886.....	41,095	16,631	18,187	22,908
1887.....	46,226	17,050	19,482	26,744
1888.....	48,952	17,233	21,764	27,188
1889.....	49,272	18,300	20,315	28,957
Total.....	458,351	278,491	317,547	440,804
Average.....	36,112	18,261	15,121	20,991

The average number of births, marriages and deaths for certain specified periods of time within the year 1889 will be found in Exhibit D. When the returns of births and deaths are corrected for omissions, as in the lower part of the exhibit, the numbers are considerably increased.

BIRTHS, MARRIAGES AND DEATHS.

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EXHIBIT D.—*The number of Marriages, Births, Deaths, and Excess of Births over Deaths in Michigan during the Year 1889, the Average Number and Excess for specified periods of time within the year as returned, and the same for Births and Deaths as corrected for omissions in the enumeration.*

Periods of time.—1889.		Marriages, 1889.	Births, 1889.	Deaths, 1889.	Excess of births over deaths.
As Returned.	Year 1889 ^a	18,800	49,272	20,315	28,957
	Quarter.....	4,575	12,318	5,079	7,239
	Month.....	1,525	4,106	1,693	2,413
	Week.....	352	947	391	556
	Day.....	50	135	56	79
Births and Deaths as Corrected.	Year 1889 ^b		65,242	27,461	37,781
	Quarter.....		16,310	6,865	9,445
	Month.....		5,436	2,288	3,148
	Week.....		1,255	528	727
	Day.....		179	75	104

^a Unknown month included.

^b Corrected as if enumerated in months of occurrence.

In Exhibit E the natural increase of population, that is, the excess of births over deaths, is shown by months for the years 1884 and 1889, inclusive. The greatest excess for 1889 occurred in May, when there were 2,784 more births than deaths. The highest average month for the ten years was also in May, and the excess 2,115.

VITAL STATISTICS OF MICHIGAN, 1889.

EXHIBIT E.—By Months, the Births, Deaths and Excess of Births over Deaths, according to the returns, in Michigan, during each of the Years 1884-1889, inclusive.

	Total. ^a	Months.											
		Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
1884.													
Births.....	40,359	2,748	2,878	3,498	3,480	3,480	3,407	3,482	3,073	3,559	3,445	3,215	3,544
Deaths.....	18,000	1,087	1,181	1,421	1,382	1,456	1,286	1,520	1,917	1,877	1,752	1,526	1,615
Excess of Births.....	22,359	1,661	1,697	2,077	2,048	2,024	2,141	1,962	1,756	1,682	1,693	1,689	1,929
1885.													
Births.....	42,068	2,707	2,987	3,533	3,618	3,780	3,946	3,507	3,924	3,995	3,624	3,363	3,689
Deaths.....	16,590	1,131	1,287	1,421	1,474	1,286	1,185	1,363	1,486	1,559	1,492	1,362	1,564
Excess of Births.....	25,493	1,576	1,720	2,112	2,144	2,444	2,161	2,204	2,438	2,436	2,132	2,001	2,125
1886.													
Births.....	41,044	2,617	2,858	3,456	3,640	3,498	3,352	3,588	3,781	3,707	3,540	3,270	3,727
Deaths.....	18,127	1,065	1,083	1,462	1,396	1,376	1,281	1,461	1,987	1,889	1,761	1,615	1,841
Excess of Births.....	22,917	1,552	1,765	1,994	2,244	2,122	2,071	2,137	1,994	1,818	1,779	1,655	1,886
1887.													
Births.....	46,166	3,132	3,150	3,987	3,886	3,980	3,666	4,011	4,366	4,331	3,944	3,765	4,058
Deaths.....	19,416	1,249	1,274	1,535	1,599	1,472	1,405	1,915	2,055	1,916	1,699	1,554	1,748
Excess of Births.....	26,750	1,883	1,876	2,452	2,287	2,488	2,261	2,096	2,311	2,415	2,245	2,211	2,315
1888.													
Births.....	48,907	3,531	3,516	4,099	3,953	4,214	4,133	4,223	4,514	4,415	4,305	3,811	4,193
Deaths.....	21,698	1,416	1,535	1,865	1,909	1,868	1,627	1,789	2,169	1,978	1,848	1,642	2,012
Excess of Births.....	27,209	2,115	1,981	2,234	2,044	2,356	2,506	2,434	2,345	2,437	2,457	2,169	2,181
1889.													
Births.....	49,272	3,940	3,104	4,001	4,057	4,238	4,050	4,252	4,526	4,882	4,292	4,331	4,646
Deaths.....	20,315	1,409	1,266	1,676	1,585	1,484	1,389	1,677	2,214	2,025	1,894	1,712	1,951
Excess of Births.....	28,957	1,931	1,838	2,325	2,472	2,754	2,661	2,575	2,312	2,857	2,398	2,619	2,695
Monthly averages of excess for 1880 to 1889, inclusive.....	23,301	1,664	1,666	1,999	1,987	2,115	2,052	2,017	1,971	1,963	1,969	1,892	2,009

^a Unknown month excluded.

BIRTHS, MARRIAGES AND DEATHS.

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EXHIBIT F.—Showing, by Sex, the Population in 1884, the Number of Marriages, Births and Deaths, and the Excess of Births over Deaths, in Michigan, during the year 1889.

State and counties.	Population, 1884.				Marriages, 1889.	Births, 1889.				Deaths, 1889.				Excess of births over deaths.			
	Total.	Sex.				Total.	Sex.			Total.	Sex.			Total.	Sex.		
		Males.	Females.	Un- known.			Males.	Females.	Un- known.		Males.	Females.	Un- known.		Males.	Females.	Un- known.
State.....	1,853,658	974,424	579,028	206	18,390	49,273	25,642	23,532	48	20,315	10,984	9,297	84	28,957	14,658	14,235	14
Alcona.....	4,028	2,428	1,600	.....	27	67	34	33	.....	19	9	10	.....	48	25	9	.....
Alger.....	a	a	a	.....	6	19	7	12	.....	5	2	3	.....	14	5	9	.....
Allegan.....	38,666	20,052	13,614	.....	318	773	385	388	.....	359	201	158	.....	414	184	230	.....
Alpena.....	12,683	6,990	5,693	.....	149	525	278	247	.....	122	67	55	.....	403	211	192	.....
Antrim.....	8,761	4,736	4,025	.....	75	214	119	95	.....	75	41	34	.....	139	78	61	.....
Arenac.....	4,027	2,319	1,708	.....	40	141	72	69	.....	47	32	15	.....	94	40	54	.....
Baraga.....	3,089	1,319	1,220	.....	27	105	63	42	.....	35	19	16	.....	70	44	26	.....
Barry.....	24,102	12,507	11,595	.....	225	464	219	245	.....	177	86	91	.....	287	133	154	.....
Bay.....	51,221	28,215	23,006	.....	498	1,659	846	813	.....	498	251	242	.....	1,166	596	571	.....
Benzie.....	4,389	2,349	2,040	.....	44	108	49	54	.....	36	18	18	.....	67	31	36	.....
Berrien.....	37,776	19,225	18,551	.....	387	648	319	328	1	238	148	136	.....	365	171	193	.....
Branch.....	27,661	14,042	13,619	.....	269	448	232	216	.....	272	141	131	.....	176	91	85	.....
Calhoun.....	41,585	21,297	20,285	3	392	607	307	300	.....	373	188	185	.....	284	119	115	Un- known.
Cass.....	21,202	10,886	10,316	.....	201	310	167	143	.....	175	84	91	.....	135	88	52	.....
Charlevoix.....	9,275	5,080	4,245	.....	79	147	70	77	.....	40	16	24	.....	107	54	53	.....
Cheboygan.....	9,946	5,503	4,443	.....	95	383	163	170	.....	107	57	50	.....	226	106	120	.....
Chippewa.....	8,422	4,746	3,676	.....	106	204	98	106	.....	75	41	34	.....	129	57	72	.....
Clare.....	5,549	3,251	2,298	.....	85	131	63	68	.....	24	17	7	.....	107	46	61	.....

a Organized since census was taken.

VITAL STATISTICS OF MICHIGAN, 1889.

EXHIBIT F.—Continued.

Counties.	Population, 1884.			Marriages, 1889.	Births, 1889.			Deaths, 1889.			Excess of births over deaths.				
	Total.	Sex.			Total.	Sex.		Total.	Sex.		Total.	Sex.			
		Males.	Females			Un- known.	Males.		Females	Un- known.		Males.	Females	Un- known.	
Clinton	27,135	14,034	13,101	---	215	426	432	193	1	236	134	102	298	91	---
Crawford	2,389	1,361	1,028	---	28	54	28	26	---	22	10	12	32	13	14
Delta	9,992	5,876	4,116	---	163	439	267	219	3	155	104	49	2	163	170
Eaton	31,302	16,210	15,592	---	293	432	289	243	---	271	131	140	---	108	108
Emmet	7,944	4,085	3,849	---	88	157	89	66	1	105	53	46	1	31	30
Genesee	33,776	19,732	18,994	---	389	543	295	253	---	327	167	160	---	123	93
Gladwin	1,539	899	640	---	39	35	12	23	---	13	3	10	---	9	13
Gogebic	a	a	a	---	107	303	169	134	---	112	78	34	---	91	100
Grand Traverse	12,092	6,522	5,570	---	140	135	114	81	---	113	60	53	---	54	23
Gratiot	25,049	13,204	11,845	---	241	500	264	236	---	188	96	92	---	163	144
Hilledale	31,636	15,911	15,775	---	286	343	183	160	---	213	113	105	---	75	55
Houghton	26,146	14,168	11,978	---	357	1,324	658	666	---	395	234	160	1	424	506
Huron	24,521	12,934	11,585	2	237	805	404	401	---	234	130	104	---	274	237
Ingham	34,939	17,917	17,022	---	347	561	284	274	3	331	170	159	2	114	115
Ionia	32,559	17,057	15,502	---	294	537	279	258	---	258	132	126	---	147	132
Iosco	10,602	6,060	4,542	---	135	350	164	136	---	131	73	53	---	91	123
Iron	a	a	a	---	40	117	59	58	---	13	13	5	---	46	53
Isabella	16,011	8,597	7,414	---	158	429	203	225	1	143	74	69	---	129	156
Jackson	45,232	23,385	21,847	---	380	699	353	341	---	439	224	215	---	134	126
Kalamazoo	35,221	17,875	17,406	---	402	679	344	335	---	431	234	197	---	110	133
Kalamazoo	4,498	2,470	2,023	a	53	101	41	60	---	50	33	17	---	8	43

BIRTHS, MARRIAGES AND DEATHS.

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	48,600	43,467	41,183	1,141	2,248	1,174	1,078	1	1,128	627	499	2	1,120	547	574	-1
Kent.....	4,667	2,851	2,116	15	181	74	57	---	48	87	11	---	88	37	46	---
Keweenaw.....	7,539	4,528	3,011	55	88	44	44	---	39	25	14	---	49	19	30	---
Lake.....	90,067	15,568	14,489	270	528	270	288	---	229	122	107	---	299	148	151	---
Lapeer.....	7,128	3,842	3,286	64	203	116	87	---	93	54	39	---	110	82	48	---
Leelanaw.....	49,584	24,916	24,698	400	666	822	343	1	482	228	209	---	284	99	134	1
Lebanon.....	21,568	11,254	10,314	182	319	166	188	---	203	110	93	---	116	56	60	---
Luce.....	a	a	a	42	78	42	86	---	11	4	7	---	67	38	28	---
Mackinac.....	5,171	2,948	2,223	56	111	65	46	---	54	29	25	---	57	86	21	---
Macomb.....	31,298	15,978	15,315	242	690	370	320	---	367	177	190	---	323	193	180	---
Manistee.....	19,875	10,879	8,996	212	685	378	307	---	212	122	90	---	478	256	217	---
Manitou.....	1,198	547	456	1	26	18	18	---	8	4	4	---	18	9	9	---
Marquette.....	31,897	17,880	18,817	375	1,198	609	589	---	429	270	159	---	769	389	480	---
Mason.....	13,221	7,282	5,989	163	412	214	196	---	169	92	77	---	248	122	121	---
Mecosta.....	20,597	11,283	9,314	223	409	207	201	1	145	86	59	---	284	121	143	1
Menominee.....	19,120	11,488	7,632	282	1,012	521	478	13	380	197	141	12	662	324	337	1
Midland.....	8,776	4,728	4,048	99	229	115	114	---	70	32	38	---	159	88	76	---
Missaukee.....	3,386	2,096	1,860	47	111	54	57	---	29	14	15	---	82	40	42	---
Monroe.....	38,383	17,196	16,107	307	613	329	284	---	272	142	130	---	341	187	154	---
Montcalm.....	88,356	18,774	16,581	312	615	310	306	---	285	129	186	---	380	181	169	---
Montmorency.....	845	494	351	14	42	22	20	---	25	12	13	---	17	10	7	---
Muskegon.....	37,584	20,522	17,029	362	1,016	539	476	1	444	284	190	---	572	285	286	1
Newaygo.....	19,996	10,884	8,812	162	336	171	165	---	116	67	49	---	220	104	116	---
Oakland.....	41,100	20,821	20,279	319	511	287	243	1	387	223	173	1	114	44	70	---
Oceana.....	14,519	7,869	6,660	118	286	189	136	---	113	60	58	---	182	99	83	---
Ogemaw.....	3,637	2,041	1,596	49	106	51	54	---	25	18	12	---	80	38	43	---
Ontonagon.....	4,886	3,329	1,507	17	50	24	26	---	34	21	12	1	16	8	14	-1

a Organized since census was taken.

VITAL STATISTICS OF MICHIGAN, 1889.

EXHIBIT F.—Continued.

Counties.	Population, 1884.				Marriages, 1889.	Births, 1889.				Deaths, 1889.				Excess of births over deaths.			
	Total.	Sex.				Total.	Sex.			Total.	Sex.			Total.	Sex.		
		Males.	Females.	Un- known.			Males.	Females.	Un- known.		Males.	Females.	Un- known.		Males.	Females.	Un- known.
Oscoda	14,001	7,533	6,468	.....	141	299	148	151	.....	93	49	44	.....	206	99	107	.....
Oscoda	1,374	798	576	.....	19	33	15	18	.....	18	13	5	.....	15	2	13	.....
Otsego	8,906	2,223	1,683	.....	89	50	26	24	.....	19	8	11	.....	31	13	18	.....
Ottawa	36,228	18,970	17,255	.....	277	849	460	888	1	375	212	160	8	474	248	228	-2
Presque Isle	4,064	2,168	1,896	.....	26	136	71	65	.....	46	29	17	.....	90	42	48	.....
Rosecommon	2,538	1,313	775	.....	18	30	18	12	.....	7	3	4	.....	23	15	8	.....
Saginaw	74,795	41,588	33,207	.....	701	2,231	1,209	1,071	1	998	560	438	.....	1,233	649	633	1
Sanilac	29,533	15,378	14,005	.....	236	777	417	360	.....	264	136	128	.....	513	281	232	.....
Schoolcraft	8,846	2,568	1,278	.....	44	74	39	35	.....	36	23	13	.....	38	16	22	.....
Shiawassee	28,073	14,731	13,347	.....	289	431	224	207	.....	168	87	81	.....	263	137	126	.....
St. Clair	46,783	24,058	22,738	2	465	1,102	579	523	.....	450	235	215	.....	652	344	308	.....
St. Joseph	26,277	13,295	12,982	.....	236	341	181	160	.....	239	123	115	1	102	53	45	-1
Tuscola	30,726	16,126	14,600	.....	292	638	329	308	1	231	159	122	.....	352	170	181	1
Van Buren	30,341	15,377	14,964	.....	284	555	283	271	1	231	135	146	.....	264	149	125	1
Washtenaw	41,694	21,067	20,627	.....	296	641	331	310	.....	344	185	159	.....	297	146	151	.....
Wayne	188,966	94,492	94,474	.....	1,922	12,023	6,371	5,636	16	4,005	2,153	1,844	8	8,018	4,218	3,792	8
Wexford	10,518	5,732	4,786	.....	116	254	133	121	.....	77	39	38	.....	177	94	83	.....

BIRTHS, 1889.

There were 49,272 births returned for the year 1889, more than returned for any previous year, while the average for the last ten years is 41,389.

The system of correction used in this report to supply the omissions in the enumeration of births is the same as the one used in the United States census reports, and by using this method the number of births returned for 1889 should be increased by about 38 per cent in order to equal the number which probably occurred. Thus about 75 per cent of the births in 1889 were returned, and the average for ten years only about 73.

Years.	Per cent of births returned.	Per cent of births added as correction for omissions.
1880.....	69.73	43.42
1881.....	69.76	43.35
1882.....	74.31	34.57
1883.....	72.57	37.79
1884.....	73.24	36.54
1885.....	72.57	37.80
1886.....	67.92	47.24
1887.....	79.01	26.57
1888.....	81.41	22.84
1889.....	75.46	38.17
Average for 10 years.....	73.80	36.83

The census of Michigan made in 1884, the latest available for this report, gave the State a population of 1,853,658, and all percentages have been figured upon this number. Subtracting from this total 9,717, the number of inhabitants from whom no returns of births for 1889 were received, gives 1,843,941 as the number of inhabitants in 1884 represented by returns of births in 1889. The following table shows that the birth-rate was 2.67 for every 100 inhabitants, and by the corrected returns 3.54 to every 100.

Sex.	Inhabitants in 1884 represented by births in 1889.	Births as returned.	Births corrected for omissions in enumerat- ing.	Per cent of births to inhabitants.	
				Births as returned.	Births corrected for omissions.
Total.....	1,843,941	49,272	65,242	2.67	3.54

The birth-rate in foreign countries as given below is taken from the 1889 Registration Report of Massachusetts.

Eastern Europe.....	41.4 to 1,000
Central Europe.....	36.7 to 1,000
Southern Europe.....	36.6 to 1,000
Northwestern Europe.....	30.5 to 1,000

The countries having the highest and lowest birth-rates are as follows:

	Highest.		Lowest.
1. Russia, 1867-78.....	49.4	5. Sweden, 1865-82.....	30.2
2. Croatia, 1874-80.....	45.3	4. Switzerland, 1870-83.....	30.2
3. Servia, 1879-83.....	43.6	3. Greece, 1865-82.....	28.4
4. Hungary, 1865-83.....	43.0	2. Ireland, 1865-83.....	26.4
5. Wurtemberg, 1865-83.....	42.6	1. France, 1870-82.....	25.4
Average.....	44.8	Average.....	29.0

During the year 1889 the birth-rate for Michigan averaged as in the table given below.

Periods of time.	Births as returned.	Corrected for omissions.	Corrected with 36.83 per cent.
Per quarter.....	12,318	16,310	16,855
Per month.....	4,106	5,436	5,618
Per week.....	947	1,255	1,296
Per day.....	135	179	185

Table 1 gives the birth-rate for the several quarters of the year. The last quarter for 1889 showing the highest number of births for any quarter of that year, and also for any quarter of the years included in the table. Heretofore the third quarter has usually contained the highest number. In the corrected returns the third quarter retains the leading place.

BIRTHS, PER QUARTER.

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TABLE I.—*Births by Quarters of the year for the years 1886-1889, and the Average for Ten Years, 1879-1888.*

Totals and months with which quarters end.		1886.		1887.		1888.		1889.		Average for 10 1879-1888.	
		Num-ber.	Per cent of total.	Num-ber.	Per cent of total.	Num-ber.	Per cent of total.	Num-ber.	Per cent of total.	Num-ber.	Per cent of total.
Totals.....		41,065	100.00	46,226	100.00	48,952	100.00	49,272	100.00	41,889	100.00
As returned.	March	8,981	21.73	10,269	22.21	11,146	22.77	10,445	21.20	9,265	22.38
	June	10,490	25.53	11,522	24.93	12,300	25.12	12,345	25.05	10,835	24.97
	September	11,066	26.98	12,608	27.27	13,152	26.87	13,160	26.71	11,128	26.89
	December	10,537	25.64	11,767	25.46	12,309	25.15	13,269	26.93	10,633	25.79
	Unknown.....	51	.12	60	.13	45	.09	53	.11	28	.07
Average a		10,274	25.00	11,557	25.00	12,238	25.00	12,318	25.00	10,347	25.00
Totals.....		60,484	100.00	58,498	100.00	60,120	100.00	65,224	100.00	54,888	100.00
As corrected for omissions.	March.....	15,060	24.88	14,222	24.31	14,824	24.66	15,406	23.62	13,569	24.72
	June.....	16,288	26.98	15,096	25.81	15,558	25.87	17,058	26.16	14,272	26.00
	September	15,664	25.90	15,528	26.55	15,759	26.21	16,914	25.93	14,378	26.19
	December	13,431	22.21	13,587	23.23	13,939	23.19	15,791	24.21	12,627	23.01
	Unknown	51	.08	60	.10	45	.07	53	.08	42	.08
Average a.....		15,121	25.00	14,623	25.00	15,030	25.00	16,906	25.00	13,722	25.00

a The number in unknown quarter of year included.

The original return of births for each month is given in table 2. The highest being in December and the lowest in February. In the average for ten years August is the highest and January the lowest. As explained in previous reports, there is a better registration of the returns for the later than for the earlier months of the year, which accounts for the difference.

TABLE 2.—*Births during the years 1887-1889, according to the Returns, the Average for Ten Years, 1879-1888, showing number and Percentage, by months in order of greatest first.*

Order.	1887.			1888.			1889.			Average for 10 years, 1879-1888.		
	Months.	Num- ber.	Per ct. of total.	Months.	Num- ber.	Per ct. of total.	Months.	Num- ber.	Per ct. of total.	Months.	Num- ber.	Per ct. of total.
	Total..	46,226	100.00	Total..	48,952	100.00	Total..	49,272	100.00	Total..	41,389	100.00
1	Sept.	4,331	9.37	Aug.	4,514	9.22	Dec.	4,646	9.43	Aug.	3,799	9.18
2	Aug.	4,266	9.23	Sept.	4,415	9.02	Aug.	4,526	9.19	Sept.	3,786	9.15
3	Dec.	4,058	8.78	Oct.	4,305	8.79	Sept.	4,382	8.80	Dec.	3,622	8.75
4	July	4,011	8.68	July	4,223	8.63	Nov.	4,331	8.79	Oct.	3,567	8.62
5	Mar.	3,987	8.62	May	4,214	8.61	Oct.	4,292	8.71	July	3,543	8.56
6	May	3,960	8.57	Dec.	4,193	8.57	July	4,252	8.63	May	3,521	8.51
7	Oct.	3,944	8.53	June ..	4,133	8.44	May	4,238	8.60	April ..	3,486	8.42
8	April ..	3,896	8.43	Mar.	4,099	8.37	April ..	4,057	8.23	Mar.	3,457	8.35
9	Nov.	3,765	8.14	Apr.	3,953	8.08	June ..	4,050	8.22	Nov.	3,444 ^a	8.32
10	June	3,666	7.93	Nov.	3,811	7.79	Mar.	4,001	8.22	June ..	3,328	8.04
11	Feb.	3,150	6.81	Jan.	3,531	7.21	Jan.	3,340	6.78	Feb.	2,992	7.23
12	Jan.	3,132	6.78	Feb.	3,516	7.18	Feb.	3,104	6.29	Jan.	2,816	6.90
	Unk.	60	.18	Unk.	45	.09	Unk.	53	.11	Unk.	28	.07
	Av. a ...	3,852	8.33	Av. a ...	4,079	8.33	Av. a ...	4,106	8.33	Av. a ...	3,449	8.33

^a Including births in unknown month.

Table 3 contains the same set of returns as Table 2, but with the corrections for omissions added, which changes the order of the months somewhat.

TABLE 3.—Births during the years 1887-1889, and the Average for Ten Years, 1879-1888, as corrected for Omissions in the enumeration, exhibiting the number and Percentage, by Months, in order of greatest first.

Order.	1887.			1888.			1889.			Average for 10 years, 1879-1888.		
	Months.	Num- ber.	Per ct. of total.	Months.	Num- ber.	Per ct. of total.	Months.	Num- ber.	Per ct. of total.	Months.	Num- ber.	Per ct. of total.
	Total ..	58,493	100.00	Total ..	60,120	100.00	Total ..	65,224	100.00	Total ..	54,888	100.00
1	Mar....	5,428	9.28	Aug....	5,410	9.00	May ...	5,856	8.98	Mar....	5,010	9.13
2	Aug....	5,257	8.99	Mar....	5,366	8.93	Aug....	5,822	8.93	Aug....	4,982	8.99
3	Sept....	5,225	8.93	May ...	5,330	8.87	Mar....	5,788	8.87	April ..	4,903	8.93
4	Apr. ...	5,208	8.89	Sept. ...	5,194	8.64	April ..	5,735	8.79	May ...	4,894	8.91
5	May ...	5,196	8.87	July ...	5,155	8.57	July ...	5,605	8.59	Sept....	4,787	8.63
6	July ...	5,046	8.63	June ...	5,136	8.54	Sept. ...	5,487	8.41	July ...	4,709	8.58
7	June ...	4,707	8.05	Apr....	5,067	8.43	June ...	5,467	8.38	June ...	4,475	8.15
8	Oct. ...	4,657	7.96	Oct. ...	4,969	8.27	Dec....	5,385	8.26	Oct. ...	4,407	8.03
9	Dec....	4,582	7.88	Jan. ...	4,774	7.95	Oct. ...	5,248	8.04	Feb....	4,301	7.84
10	Jan. ...	4,425	7.57	Feb....	4,630	7.78	Nov....	5,158	7.91	Jan. ...	4,258	7.76
11	Feb....	4,369	7.47	Dec....	4,655	7.74	Jan. ...	5,040	7.73	Dec....	4,244	7.73
12	Nov....	4,348	7.43	Nov....	4,315	7.18	Feb....	4,585	7.03	Nov....	3,976	7.24
	Unk....	60	.10	Unk, ..	45	.07	Unk....	53	.08	Unk. ...	42	.08
	Av. a...	4,874	8.33	Av. a...	5,010	8.33	Av. a...	5,481	8.33	Av. a...	4,574	8.33

a Including births in unknown month.

PROPORTION OF THE SEXES.

Table 4 gives the number of births for each month from every county in the State. As usual, the males outnumber the females, the ratio being about 109 males to every 100 females.

The number of births in which the sex was not reported is 53, while for 1888 only 25 were reported as unknown.

TABLE 4.—*Exhibiting, by Counties and by Sex, the Number of Births Returned for the Year, and in each month of the year ending December 31, 1889. (Still-births included.)*

State and counties.	Sex.	Year, 1889.	Months, 1889.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
State	Totals.....	49,272	3340	3104	4001	4057	4238	4050	4252	4526	4382	4292	4331	4646	53
	Males.....	25,642	1756	1607	2128	2081	2181	2096	2256	2370	2275	2247	2252	2368	25
	Females.....	23,582	1582	1495	1867	1974	2056	1950	1991	2152	2101	2041	2075	2275	28
	Unknown..	48	2	2	6	2	1	4	5	4	6	4	4	3	5
Alcona	Totals.....	67	3	5	8	5	2	6	10	8	6	4	6	4	---
	Males.....	34	2	1	5	3	---	4	7	3	3	2	2	2	---
	Females.....	33	1	4	3	2	2	2	3	5	3	2	4	2	---
Alger	Totals.....	19	2	1	---	2	---	---	1	1	6	---	4	2	---
	Males.....	7	---	1	---	1	---	---	---	---	3	---	1	1	---
	Females.....	12	2	---	---	1	---	---	1	1	3	---	3	1	---
Allegan	Totals.....	773	39	48	88	60	71	60	71	64	63	61	72	80	1
	Males.....	385	18	25	43	27	28	32	41	39	27	28	34	42	1
	Females.....	388	21	23	40	33	43	28	30	25	36	33	38	38	---
Alpena	Totals.....	525	29	34	39	59	52	56	49	46	49	36	33	40	3
	Males.....	278	16	16	24	32	32	29	22	27	26	19	18	21	1
	Females.....	247	13	18	15	27	20	27	27	19	23	17	20	19	2
Antrim	Totals.....	214	12	16	17	13	17	22	20	22	14	23	17	16	---
	Males.....	119	5	10	8	9	7	11	12	9	6	20	12	10	---
	Females.....	95	7	6	9	4	10	11	8	13	8	8	5	6	---
Arenac	Totals.....	141	10	9	21	12	12	11	8	11	7	17	13	10	---
	Males.....	72	4	6	8	6	7	4	5	7	3	9	8	5	---
	Females.....	69	6	3	13	6	5	7	3	4	4	8	5	5	---
Baraga	Totals.....	105	8	6	8	9	5	12	10	13	7	4	10	7	1
	Males.....	63	4	5	5	5	3	7	7	3	4	4	5	5	1
	Females.....	42	4	1	3	4	2	5	3	10	3	---	5	2	---
Barry	Totals.....	464	34	28	37	34	40	26	45	43	39	45	40	43	---
	Males.....	219	12	11	16	16	17	9	20	26	22	23	23	24	---
	Females.....	245	22	17	21	18	23	17	25	22	17	22	17	24	---
Bay	Totals.....	1,659	96	102	112	155	141	134	127	132	129	153	146	132	---
	Males.....	846	60	52	63	80	74	73	56	66	65	72	67	88	---
	Females.....	813	36	50	49	75	67	61	71	66	64	81	79	94	---

BIRTHS, BY COUNTIES, BY MONTHS, BY SEX.

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TABLE 4.—CONTINUED.—*Births by counties, by months and by sex.*

Counties.	Sex.	Year, 1889.	Months, 1889.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Benzie.....	Totals.....	103	4	3	5	11	16	12	8	7	14	7	10	5	1
	Males.....	49	4	1	2	7	10	6	3	2	5	-----	6	3	-----
	Females.....	54	-----	2	3	4	6	6	5	5	9	7	4	2	-----
Berrien.....	Totals.....	648	38	43	46	40	61	62	48	62	70	49	67	62	-----
	Males.....	319	20	17	25	20	26	29	20	37	31	24	33	37	-----
	Females.....	328	18	26	20	20	35	33	28	25	39	25	34	25	-----
	Unknown.....	1	-----	-----	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Branch.....	Totals.....	448	26	27	39	38	34	33	40	38	43	40	43	47	-----
	Males.....	232	14	16	26	23	20	13	24	15	22	20	18	21	-----
	Females.....	216	12	11	13	15	14	20	16	23	21	20	25	26	-----
Calhoun.....	Totals.....	607	43	37	53	52	46	43	35	67	56	63	64	47	-----
	Males.....	307	18	21	24	24	23	21	20	35	30	34	30	26	-----
	Females.....	300	25	16	29	28	23	22	15	32	26	29	34	21	-----
Cass.....	Totals.....	310	15	17	24	32	23	22	22	31	28	31	27	37	-----
	Males.....	167	10	13	12	17	9	14	13	15	20	14	12	17	-----
	Females.....	143	5	4	12	15	14	8	9	16	8	17	15	20	-----
Charlevoix.....	Totals.....	147	7	6	12	4	18	15	11	20	18	14	6	16	-----
	Males.....	70	1	1	5	1	7	12	6	13	7	9	3	5	-----
	Females.....	77	6	5	7	3	11	3	5	7	11	5	3	11	-----
Cheboygan.....	Totals.....	333	15	14	29	32	26	39	28	34	24	28	25	39	-----
	Males.....	163	9	4	15	15	14	20	11	14	14	18	6	23	-----
	Females.....	170	6	10	14	17	12	19	17	20	10	10	19	16	-----
Chippewa.....	Totals.....	204	12	21	21	18	15	16	14	18	20	20	10	19	-----
	Males.....	98	4	13	8	9	6	6	7	9	12	10	3	11	-----
	Females.....	106	8	8	13	9	9	10	7	9	8	10	7	8	-----
Clare.....	Totals.....	131	3	6	8	11	15	17	13	13	18	8	10	9	-----
	Males.....	63	2	3	4	5	9	8	6	8	6	4	5	3	-----
	Females.....	68	1	3	4	6	6	9	7	5	12	4	5	6	-----
Clinton.....	Totals.....	426	27	20	40	25	45	33	29	40	52	35	40	40	-----
	Males.....	232	15	11	21	13	20	17	14	22	33	13	23	30	-----
	Females.....	193	12	9	19	12	25	16	14	18	19	22	17	10	-----
	Unknown.....	1	-----	-----	-----	-----	-----	-----	1	-----	-----	-----	-----	-----	-----
Crawford.....	Totals.....	54	4	4	3	7	3	5	2	8	6	6	4	2	-----
	Males.....	28	2	3	2	4	1	2	-----	5	1	4	2	2	-----
	Females.....	26	2	1	1	3	2	3	2	3	5	2	2	-----	-----

TABLE 4.—CONTINUED.—Births by counties, by months and by sex.

Counties.	Sex.	Year, 1889.	Months, 1889.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Delta	Totals.....	489	34	35	39	31	33	49	46	59	50	30	42	40	---
	Males.....	267	17	17	21	13	18	26	29	31	28	19	21	27	---
	Females.....	219	17	18	18	18	15	23	17	28	22	10	21	12	---
	Unknown.....	3	---	1	---	---	---	---	---	---	---	1	---	1	---
Eaton	Totals.....	482	21	39	36	37	48	32	38	50	47	41	33	60	---
	Males.....	239	11	22	16	17	26	11	20	23	27	17	18	31	---
	Females.....	243	10	17	20	20	22	21	18	27	20	24	15	29	---
Emmet	Totals.....	156	6	13	9	12	14	11	14	20	16	14	15	12	---
	Males.....	89	1	7	5	7	9	6	12	13	10	4	8	7	---
	Females.....	66	5	6	3	5	5	5	2	7	6	10	7	5	---
Genesee	Totals.....	548	31	14	46	45	44	55	44	51	46	47	62	62	1
	Males.....	295	19	5	21	22	29	30	31	30	21	25	35	27	---
	Females.....	253	12	9	25	23	15	25	13	21	25	22	27	35	1
Gladwin	Totals.....	35	1	7	4	2	4	4	1	5	---	1	2	4	---
	Males.....	12	1	1	1	1	---	2	---	3	---	1	---	2	---
	Females.....	23	---	6	3	1	4	2	1	2	---	---	2	2	---
Gogebic	Totals.....	303	28	20	28	34	19	30	19	27	19	25	30	24	---
	Males.....	169	12	13	14	21	7	16	10	15	11	13	19	18	---
	Females.....	134	16	7	14	13	12	14	9	12	8	12	11	6	---
Gd. Traverse	Totals.....	195	2	10	19	16	25	16	18	15	15	18	21	19	1
	Males.....	114	1	6	14	8	17	10	9	8	10	10	13	8	---
	Females.....	81	1	4	5	8	8	6	9	7	5	8	8	11	1
Gratiot	Totals.....	500	19	20	36	53	51	48	44	55	49	45	40	38	2
	Males.....	264	9	10	22	26	21	32	20	26	27	25	22	22	2
	Females.....	236	10	10	14	27	30	16	24	29	22	20	18	16	---
Hillsdale	Totals.....	348	16	17	25	31	37	34	29	31	30	41	28	29	---
	Males.....	188	9	7	12	16	16	20	15	22	15	25	13	18	---
	Females.....	160	7	10	13	15	21	14	14	9	15	16	15	11	---
Houghton	Totals.....	1,324	110	91	132	86	124	107	125	121	104	117	95	111	1
	Males.....	653	54	48	63	37	68	53	54	74	49	59	53	46	---
	Females.....	666	56	43	69	49	56	54	71	47	55	58	42	65	1
Huron	Totals.....	805	47	51	74	64	75	65	74	74	92	66	67	54	2
	Males.....	404	24	27	36	36	38	31	41	32	50	32	32	24	1
	Females.....	401	23	24	38	28	37	34	33	42	42	34	35	30	1

BIRTHS, BY COUNTIES, BY MONTHS, BY SEX.

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TABLE 4.—CONTINUED.—*Births by counties, by months, and by sex.*

Counties.	Sex.	Year, 1889.	Months, 1889.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Ingham.....	Totals	561	44	31	33	43	43	42	56	54	57	39	63	54	2
	Males	284	22	18	14	20	23	22	30	31	21	22	32	28	1
	Females	274	22	13	19	22	20	20	25	23	36	17	31	26	---
	Unknown	3	---	---	---	1	---	---	1	---	---	---	---	---	1
Ionia.....	Totals	537	36	31	40	38	48	49	67	52	42	54	43	37	---
	Males	279	20	17	19	21	23	30	36	29	21	27	19	17	---
	Females	258	16	14	21	17	25	19	31	23	21	27	24	20	---
Iosco.....	Totals	350	20	22	20	26	25	44	34	27	51	23	27	31	---
	Males	164	11	11	11	11	12	23	22	11	19	10	13	10	---
	Females	186	9	11	9	15	13	21	12	16	32	13	14	21	---
Iron.....	Totals	117	11	9	12	8	8	14	6	5	10	11	4	19	---
	Males	59	6	4	7	3	6	7	5	5	2	4	3	7	---
	Females	58	5	5	5	5	2	7	1	---	8	7	1	12	---
Isabella.....	Totals	429	19	25	20	32	53	39	41	44	43	36	39	37	1
	Males	203	6	14	9	12	23	15	20	23	22	14	23	21	1
	Females	225	13	11	11	20	30	24	21	21	20	22	16	16	---
	Unknown	1	---	---	---	---	---	---	---	---	1	---	---	---	---
Jackson.....	Totals	699	59	39	49	73	71	40	63	60	72	58	56	59	---
	Males	358	30	17	32	40	30	16	33	27	37	34	27	35	---
	Females	341	29	22	17	33	41	24	30	33	35	24	29	24	---
Kalamazoo ..	Totals	679	44	34	59	42	55	55	56	70	68	57	70	67	2
	Males	344	18	18	35	24	23	27	32	32	39	33	32	31	---
	Females	335	26	16	24	18	32	28	24	38	29	24	38	36	2
Kalkaska.....	Totals	101	1	8	3	13	16	12	9	12	7	6	8	6	---
	Males	41	---	3	2	2	8	5	4	5	4	3	3	2	---
	Females	60	1	5	1	11	8	7	5	7	3	3	5	4	---
Kent.....	Totals	2,248	147	131	139	194	185	187	191	207	215	183	224	244	1
	Males	1,174	86	60	75	96	89	104	95	96	127	105	120	120	1
	Females	1,073	61	71	64	98	96	83	96	111	88	78	103	124	---
	Unknown	1	---	---	---	---	---	---	---	---	---	---	1	---	---
Keweenaw ..	Totals	131	8	8	10	20	9	11	13	10	14	7	14	7	---
	Males	74	1	4	5	8	9	9	10	6	5	6	7	4	---
	Females	57	7	4	5	12	---	2	3	4	9	1	7	3	---
Lake.....	Totals	88	6	9	5	8	7	9	3	10	4	12	4	11	---
	Males	44	5	6	3	---	6	5	2	5	3	5	1	3	---
	Females	44	1	3	2	8	1	4	1	5	1	7	3	8	---

TABLE 4.—CONTINUED.—*Births by counties, by months, and by sex.*

Counties.	Sex.	Year, 1889.	Months, 1889.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Lapeer	Totals	528	30	34	44	39	58	41	45	48	59	38	49	43	---
	Males	270	18	19	21	14	32	18	26	22	27	25	28	20	---
	Females	258	12	15	23	25	26	23	19	26	32	13	21	23	---
Leelanaw	Totals	203	8	8	13	14	16	17	17	32	20	18	18	22	---
	Males	116	7	5	8	10	8	8	7	18	13	12	11	9	---
	Females	87	1	3	5	4	8	9	10	14	7	6	7	13	---
Lenawee	Totals	666	39	49	60	48	58	51	51	66	67	55	57	64	1
	Males	322	16	23	27	30	21	22	29	32	37	26	29	30	---
	Females	343	23	25	33	18	37	29	22	34	30	29	28	34	1
	Unknown	1	---	1	---	---	---	---	---	---	---	---	---	---	---
Livingston	Totals	319	32	14	26	24	30	23	23	29	35	35	18	30	---
	Males	166	17	6	21	16	17	10	12	14	15	17	11	10	---
	Females	153	15	8	5	8	13	13	11	15	20	18	7	20	---
Luce	Totals	78	19	4	7	7	7	8	4	4	2	8	5	2	1
	Males	42	11	---	4	4	4	4	4	3	1	2	2	2	1
	Females	36	8	4	3	3	3	4	---	1	1	6	3	---	---
Mackinac	Totals	111	11	6	7	8	11	9	5	11	8	9	9	13	4
	Males	65	7	2	6	3	8	5	1	6	6	7	5	6	3
	Females	46	4	4	1	5	3	4	4	5	2	2	4	7	1
Macomb	Totals	690	49	44	56	55	51	59	71	66	70	49	67	53	---
	Males	370	30	26	26	27	26	27	41	36	35	25	40	31	---
	Females	320	19	18	30	28	25	32	30	30	35	24	27	22	---
Manistee	Totals	685	46	36	69	59	60	50	58	69	52	59	60	67	---
	Males	378	27	15	45	30	28	27	34	42	28	31	34	37	---
	Females	307	19	21	24	29	32	23	24	27	24	28	26	30	---
Manitou	Totals	26	---	1	2	3	4	2	1	4	2	2	2	3	---
	Males	13	---	---	1	---	2	1	1	2	1	2	1	2	---
	Females	13	---	1	1	3	2	1	---	2	1	---	1	1	---
Marquette	Totals	1,198	69	69	104	110	106	117	97	115	96	98	98	119	---
	Males	609	31	29	54	54	55	52	48	67	46	53	59	61	---
	Females	589	38	40	50	56	51	65	49	48	50	45	39	58	---
Mason	Totals	412	23	23	21	34	37	42	41	36	38	38	39	40	---
	Males	214	12	11	9	17	11	21	23	21	24	20	22	23	---
	Females	198	11	12	12	17	26	21	18	15	14	18	17	17	---

BIRTHS, BY COUNTIES, BY MONTHS, BY SEX.

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TABLE 4.—CONTINUED.—*Births by counties, by months and by sex.*

Counties.	Sex.	Year, 1889.	Months, 1889.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Mecosta.	Totals.....	409	13	26	30	45	43	35	32	35	37	42	34	27	---
	Males.....	207	8	15	19	26	27	18	13	15	18	19	17	12	---
	Females.....	201	10	11	11	19	21	17	19	19	19	23	17	15	---
	Unknown.....	1	---	---	---	---	---	---	---	1	---	---	---	---	---
Menominee.	Totals.....	1,012	56	69	86	82	84	91	78	82	90	96	98	98	2
	Males.....	521	30	33	44	43	45	40	35	43	54	52	49	43	---
	Females.....	478	25	36	41	39	38	47	42	34	34	44	43	43	2
	Unknown.....	13	1	---	1	---	1	4	1	---	2	---	1	2	---
Midland.	Totals.....	229	9	11	13	26	20	24	25	24	21	19	15	22	---
	Males.....	115	6	7	8	8	8	16	13	7	16	6	8	12	---
	Females.....	114	3	4	5	18	12	8	12	17	5	13	7	10	---
Missaukee.	Totals.....	111	4	9	7	10	13	5	7	18	10	6	7	15	---
	Males.....	54	2	6	3	5	7	3	6	9	3	2	3	5	---
	Females.....	57	2	3	4	5	6	2	1	9	7	4	4	10	---
Monroe.	Totals.....	613	40	31	53	51	55	59	53	56	64	49	44	53	---
	Males.....	329	27	21	29	25	30	35	31	31	27	21	24	23	---
	Females.....	284	13	10	24	26	25	24	22	25	37	28	20	30	---
Montcalm.	Totals.....	615	40	32	60	53	65	54	54	60	39	43	50	55	---
	Males.....	310	20	15	27	30	34	28	26	30	21	23	25	31	---
	Females.....	305	20	17	33	23	31	26	28	30	18	25	25	24	---
Montmorency.	Totals.....	42	---	3	2	4	6	2	2	3	8	2	5	5	---
	Males.....	22	---	1	---	3	2	2	1	2	3	2	3	3	---
	Females.....	20	---	2	2	1	4	---	1	1	5	---	2	2	---
Muskegon.	Totals.....	1,016	39	32	34	35	38	77	36	105	31	77	79	33	---
	Males.....	539	46	47	45	43	38	43	50	51	42	40	37	52	---
	Females.....	476	43	35	38	42	50	29	36	54	39	37	42	31	---
	Unknown.....	1	---	---	1	---	---	---	---	---	---	---	---	---	---
Newaygo.	Totals.....	336	15	17	27	26	32	20	40	29	36	25	33	30	6
	Males.....	171	10	11	11	13	15	12	27	12	15	7	17	19	2
	Females.....	165	5	6	16	13	17	8	13	17	21	18	16	11	4
Oakland.	Totals.....	511	28	30	44	43	33	37	37	60	52	43	40	53	1
	Males.....	267	13	19	20	17	17	22	21	32	27	22	22	30	---
	Females.....	243	10	11	24	31	16	15	16	28	25	21	13	23	---
	Unknown.....	1	---	---	---	---	---	---	---	---	---	---	---	---	1
Oceana.	Totals.....	295	19	13	27	26	27	23	17	34	19	29	19	31	1
	Males.....	159	15	6	14	15	12	13	13	21	11	15	10	14	---
	Females.....	136	4	12	13	11	15	15	4	13	8	14	9	17	1

TABLE 4.—CONTINUED.—*Births by counties, by months and by sex.*

Counties.	Sex.	Year, 1889.	Months, 1889.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Ogemaw	Totals.....	105	7	6	9	11	10	12	10	14	6	8	3	9	---
	Males.....	51	3	3	6	4	3	8	6	7	1	5	---	5	---
	Females.....	54	4	3	3	7	7	4	4	7	5	3	3	4	---
Ontonagon	Totals.....	50	2	5	6	4	4	5	3	5	6	6	2	2	---
	Males.....	24	2	2	2	2	2	3	2	3	2	2	1	1	---
	Females.....	26	---	3	4	2	2	2	1	2	4	4	1	1	---
Osceola	Totals.....	299	12	13	24	21	27	40	39	33	30	16	26	18	---
	Males.....	148	6	6	12	10	16	20	19	11	17	11	13	7	---
	Females.....	151	6	7	12	11	11	20	20	22	13	5	13	11	---
Oscoda	Totals.....	33	1	---	---	---	4	3	7	3	2	4	2	7	---
	Males.....	15	1	---	---	---	2	1	3	1	2	1	1	3	---
	Females.....	18	---	---	---	---	2	2	4	2	---	3	1	4	---
Otsego	Totals.....	50	---	3	5	2	2	7	6	7	5	4	3	6	---
	Males.....	26	---	2	3	1	1	4	2	4	2	2	2	3	---
	Females.....	24	---	1	2	1	1	3	4	3	3	2	1	3	---
Ottawa	Totals.....	849	47	57	66	72	73	78	80	74	71	90	70	70	1
	Males.....	460	23	30	36	41	41	45	38	45	39	56	34	27	---
	Females.....	388	19	27	30	31	32	33	41	29	32	34	36	43	1
	Unknown.....	1	---	---	---	---	---	---	1	---	---	---	---	---	---
Presque Isle	Totals.....	136	8	11	9	15	10	13	7	13	13	13	13	11	---
	Males.....	71	4	5	5	6	6	7	4	8	4	5	10	7	---
	Females.....	65	4	6	4	9	4	6	3	5	9	8	3	4	---
Roscommon	Totals.....	30	2	4	2	---	3	2	3	2	1	3	2	6	---
	Males.....	18	1	3	1	---	3	2	2	1	---	3	1	1	---
	Females.....	12	1	1	1	---	---	---	1	1	1	---	1	5	---
Saginaw	Totals.....	2,281	197	156	192	205	204	172	184	189	196	163	209	214	---
	Males.....	1,209	106	83	110	118	99	90	101	104	101	86	119	92	---
	Females.....	1,071	91	73	82	87	105	82	82	85	95	77	90	122	---
	Unknown.....	1	---	---	---	---	---	---	1	---	---	---	---	---	---
Sanilac	Totals.....	777	36	44	74	85	80	66	65	62	76	51	70	68	---
	Males.....	417	15	26	45	44	46	30	40	32	35	31	35	38	---
	Females.....	360	21	18	29	41	34	36	25	30	41	20	35	30	---
Schoolcraft	Totals.....	74	1	2	5	5	5	11	9	5	8	4	6	12	1
	Males.....	39	---	1	3	1	2	8	5	2	4	2	4	7	---
	Females.....	35	1	1	2	4	3	3	4	3	4	2	2	5	1

TABLE 4.—CONTINUED.—*Births by counties, by months, and by sex.*

Counties.	Sex.	Year, 1889.	Months, 1889.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Shiawassee.....	Totals.....	431	32	29	29	39	33	33	32	43	29	44	42	46	---
	Males.....	224	16	9	14	22	13	12	17	25	17	27	26	26	---
	Females.....	207	16	20	15	17	20	21	15	18	12	17	16	20	---
St. Clair.....	Totals.....	1,102	63	57	94	86	84	72	109	105	94	104	123	106	5
	Males.....	579	34	24	52	43	51	39	63	54	43	58	52	63	3
	Females.....	523	29	33	42	43	33	33	46	51	51	46	71	43	2
St. Joseph.....	Totals.....	341	21	23	34	23	25	20	24	29	27	35	41	39	---
	Males.....	181	11	13	23	11	15	7	12	14	14	18	27	16	---
	Females.....	160	10	10	11	12	10	13	12	15	13	17	14	23	---
Tuscola.....	Totals.....	633	43	27	55	54	46	55	62	64	53	54	57	63	---
	Males.....	329	25	15	27	39	29	26	33	29	29	25	33	28	---
	Females.....	303	18	12	28	23	17	29	29	35	24	29	24	35	---
	Unknown.....	1	---	---	---	1	---	---	---	---	---	---	---	---	---
Van Buren.....	Totals.....	555	25	29	39	33	53	43	58	65	48	54	44	62	2
	Males.....	283	9	15	22	21	21	16	27	34	27	34	24	32	1
	Females.....	271	16	14	17	12	32	27	31	31	21	20	20	30	---
	Unknown.....	1	---	---	---	---	---	---	---	---	---	---	---	---	1
Washtenaw.....	Totals.....	641	34	32	65	55	72	52	38	60	60	56	60	54	3
	Males.....	331	22	17	32	30	40	28	23	21	34	30	25	27	2
	Females.....	310	12	15	33	25	32	24	15	39	26	26	35	27	1
Wayne.....	Totals.....	12,023	1,014	864	988	936	986	918	1,070	948	1,000	1,143	1,055	1,147	4
	Males.....	6,371	522	464	529	499	519	488	564	506	529	594	554	601	2
	Females.....	5,636	491	400	457	437	417	430	506	439	468	546	499	546	---
	Unknown.....	16	1	---	2	---	---	---	---	3	3	3	2	---	2
Wexford.....	Totals.....	254	14	14	20	22	22	20	20	22	31	15	2	31	---
	Males.....	133	10	7	11	7	11	13	9	11	17	8	14	15	---
	Females.....	121	4	7	9	15	11	7	11	11	14	7	9	16	---

The number of inhabitants, the births, the birth rates and the proportion of the sexes among the different races of the State are given in Table 5. The working out of the percentages in this report was held for some time in hopes that the returns of the last census would be available, but as they could not be obtained in time, the census of 1884 was used. The population of the State has, of course, changed considerably, which would make much difference in the per cents.

TABLE 5.—*Exhibiting by color and sex, the population of Michigan June 1, 1884, the number of births returned for the year 1889, the per cent of births to population, and the per cent of births of each sex to the total of both sexes. (Still births included.)*

Race or color.	Sex.	Population June 1, 1884, represented by births in 1889.	Children born in 1889.	Per cent of births of each color to total of all colors by sex.	Per cent of children born to inhabitants.	Per cent of each sex to children of both sexes.	Inhabitants to one child born, by color and sex.
All colors.....	Totals.....	a 1,843,941	49,272	100.00	2.67	-----	37.42
	Males.....	968,794	25,642	100.00	2.65	52.09	37.78
	Females.....	874,941	23,582	100.00	2.70	47.91	37.10
	Unknown.....	206	48	-----	-----	-----	-----
White.....	Totals.....	1,820,947	48,834	99.11	2.68	-----	37.29
	Males.....	956,854	25,414	99.11	2.66	52.09	37.66
	Females.....	864,083	23,381	99.15	2.71	47.91	36.96
	Unknown.....	10	39	81.25	-----	-----	-----
Black.....	Totals.....	6,853	206	.42	3.01	-----	33.27
	Males.....	3,690	102	.40	2.76	49.51	36.18
	Females.....	3,163	104	.44	3.29	50.49	30.41
Mulatto.....	Totals.....	8,257	69	.14	.84	-----	119.67
	Males.....	4,208	38	.13	.79	47.83	127.36
	Females.....	4,054	36	.15	.89	52.17	112.61
Indian.....	Totals.....	6,784	110	.22	1.62	-----	61.67
	Males.....	3,509	69	.27	1.97	63.30	50.86
	Females.....	3,275	40	.17	1.22	36.70	81.87
	Unknown.....	-----	1	-----	-----	-----	-----
Unknown color.....	Totals.....	1,030	53	.11	5.15	-----	19.43
	Males.....	468	24	.09	5.13	46.67	19.50
	Females.....	366	21	.09	5.74	53.33	17.43
	Unknown.....	196	8	-----	-----	-----	-----
Black and Mulatto.....	Totals.....	15,110	275	.56	1.82	-----	54.95
	Males.....	7,893	135	.53	1.71	49.09	53.47
	Females.....	7,217	140	.59	1.94	50.91	51.55

a Includes 70 Asiatic males.

Table 6 shows the number of births in 1889, and the number of inhabitants in 1884 for each county and by sex. The proportion of births to the number of inhabitants in each county can be seen by this table, but it should be borne in mind that the registration differs much in different counties, some being very imperfect.

The birth rate will be found highest in manufacturing and mining districts, while in the towns and cities where little or no manufacturing is carried on, and agricultural interests largely predominate, the birth rate is much lower. This leads to the conclusion

that mercantile, industrial and manufacturing pursuits have a greater attraction for the younger element of our population than the more quiet work on our farms, and thus the young men and women are drawn from the country into the cities. A large proportion of our foreign population is also found in these manufacturing centers and the percentage of births from this class is usually very large.

TABLE 6.—*Exhibiting, for the State and counties of Michigan, by sex, the population in 1884, the per cent of births in 1889 to population, the number of males to 100 females, and by sex and color, the births returned for 1889. (Still births included.)*

State and counties.	Sex.	Per cent of births of each sex to total of both sexes.	Population in 1884 represented by births in 1889.	Per cent of births of each sex to population of same sex.	Color—Children born in 1889.				
					Total of all colors.	White.	Black.	Mullato.	Indian.
State	Totals		1,843,941	2.67	49,272	48,534	206	69	110
	Males	52.43	968,794	2.65	25,642	25,414	102	33	69
	Females	47.57	874,941	2.69	23,582	23,381	104	36	40
	Unknown		206		48	39			1
Alcona	Totals		4,028	1.66	67	67			
	Males	50.75	2,428	1.40	34	34			
	Females	49.25	1,600	2.06	33	33			
Alcona ^a	Totals				19	17			2
	Males	36.84			7	6			1
	Females	63.16			12	11			1
Allegan	Totals		38,686	2.00	773	764	4	3	2
	Males	49.80	20,052	1.92	385	382	2		1
	Females	50.20	18,614	2.08	388	382	2	3	1
Alpena	Totals		12,688	4.14	525	525			
	Males	52.95	6,990	3.98	278	278			
	Females	47.05	5,693	4.34	247	247			
Antrim	Totals		8,761	2.44	214	213		1	
	Males	55.61	4,736	2.51	119	119			
	Females	44.39	4,025	2.36	95	94		1	
Arenac	Totals		4,027	3.50	141	139			2
	Males	51.06	2,319	3.10	72	72			
	Females	48.94	1,708	4.04	69	67			2
Baraga	Totals		3,039	3.46	105	87			18
	Males	60.00	1,819	3.46	63	51			12
	Females	40.00	1,220	3.44	42	36			6
Barry	Totals		24,102	1.93	464	464			
	Males	47.20	12,507	1.75	219	219			
	Females	52.80	11,595	2.11	245	245			

^a Organized since census was taken.

TABLE 6.—CONTINUED.—*Births by counties, by sex, and by color.*

Counties.	Sex.	Per cent of births of each sex to total of both sexes.	Population in 1884 represented by births in 1889.	Per cent of births of each sex to population of same sex.	Color—Children born in 1889.					
					Total of all colors.	White.	Black.	Mullato.	Indian.	Unknown.
Bay	Totals		51,221	3.24	1,659	1,652	4	3		
	Males	50.99	28,215	2.29	846	845		1		
	Females	49.01	23,000	3.44	813	807	4	2		
Benzie	Totals		4,389	2.35	103	98	5			
	Males	47.57	2,349	2.09	49	47	2			
	Females	52.43	2,040	2.64	54	51	3			
Berrien	Totals		37,776	1.72	648	647	1			
	Males	49.23	19,225	1.65	319	318	1			
	Females	50.77	18,551	1.77	328	328				
	Unknown				1	1				
Branch	Totals		27,661	1.62	448	447	1			
	Males	51.79	14,042	1.65	232	231	1			
	Females	48.21	13,619	1.59	216	216				
Calhoun	Totals		41,585	1.46	607	599	4	4		
	Males	50.58	21,297	1.44	307	303	3	1		
	Females	49.42	20,285	1.48	300	296	1	3		
	Unknown		3							
Cass	Totals		21,202	1.46	310	285	9	15	1	
	Males	53.87	10,886	1.52	167	153	5	8	1	
	Females	46.13	10,316	1.39	143	132	4	7		
Charlevoix	Totals		9,275	1.59	147	146		1		
	Males	47.62	5,080	1.39	70	70				
	Females	52.38	4,245	1.81	77	76		1		
Cheboygan	Totals		9,946	3.34	333	330	1		2	
	Males	48.95	5,503	2.96	163	162			a 1	
	Females	51.05	4,443	3.88	170	168	1		b 1	
Chippewa	Totals		7,127	2.86	204	204				
	Males	48.04	3,954	2.48	98	98				
	Females	51.96	3,173	3.34	106	106				
Clare	Totals		5,549	2.36	131	131				
	Males	48.09	3,251	1.94	63	63				
	Females	51.91	2,298	2.95	68	68				
Clinton	Totals		27,135	1.57	426	424	1	1		
	Males	54.46	14,034	1.65	232	232				
	Females	45.54	13,101	1.47	193	191	1	1		
	Unknown				1	1				

a Indian and white.

b White and Indian.

TABLE 6.—CONTINUED.—*Births by counties, by sex, and by color.*

Counties.	Sex.	Per cent of births of each sex to total of both sexes.	Population in 1884, represented by births in 1888.	Per cent of births of each sex to population of same sex.	Color—Children born in 1889.				
					Total of all colors.	White.	Black.	Mulatto.	Indian.
Crawford	Totals		1,857	2.91	54	54			
	Males	51.85	1,034	2.71	28	28			
	Females	48.15	823	3.16	26	26			
Delta	Totals		9,817	4.97	489	485			3
	Males	54.80	5,776	4.62	267	265			b 2
	Females	45.40	4,041	5.42	219	218			1
	Unknown				3	2			1
Eaton	Totals		31,802	1.52	482	481	1		
	Males	49.59	16,210	1.47	239	238	1		
	Females	50.41	15,592	1.56	243	243			
Emmet	Totals		7,944	1.96	156	132		1	23
	Males	57.05	4,095	2.17	89	74		1	14
	Females	42.95	3,849	1.71	66	57			9
	Unknown				1	1			
Genesee	Totals		38,776	1.41	548	545	1	2	
	Males	53.83	19,782	1.49	295	295			
	Females	46.17	18,994	1.33	253	250	1	2	
Gladwin	Totals		1,242	2.81	35	35			
	Males	34.29	717	1.67	12	12			
	Females	65.71	525	4.38	23	23			
Gogebic a	Totals				303	303			
	Males				169	169			
	Females				134	134			
Grand Traverse	Totals		6,699	2.91	195	194		1	
	Males	58.41	3,695	3.09	114	113		1	
	Females	41.59	3,004	2.70	81	81			
Gratiot	Totals		25,049	2.00	500	499		1	
	Males	52.80	13,204	2.00	264	263		1	
	Females	47.20	11,845	1.99	236	236			
Hillsdale	Totals		31,686	1.10	348	348			
	Males	54.02	15,911	1.18	188	188			
	Females	45.98	15,775	1.01	160	160			
Houghton	Totals		26,146	5.07	1,324	1,323	1		
	Males	49.70	14,168	4.64	658	658			
	Females	50.30	11,978	5.56	666	665	1		

a Organized since census was taken. b White and Indian.

TABLE 6.—CONTINUED.—*Births by counties, by sex, and by color.*

Counties.	Sex.	Per cent of births of each sex to total of both sexes.	Population in 1884, represented by births in 1889.	Per cent of births of each sex to population of same sex.	Color—Children born in 1889.					
					Total of all colors.	White.	Black.	Mulatto.	Indian.	Unknown.
Huron	Totals		21,521	3.74	805	805				
	Males	50.19	12,364	3.12	404	404				
	Females	49.81	11,585	3.46	401	401				
	Unknown		2							
Ingham	Totals		34,939	1.61	561	546	13	1		1
	Males	50.62	17,917	1.59	284	281	3			
	Females	49.38	17,022	1.61	274	263	10	1		
	Unknown				3	2				1
Ionia	Totals		32,559	1.65	537	537				
	Males	51.96	17,057	1.63	279	279				
	Females	48.04	15,502	1.66	258	258				
Iosco	Totals		10,560	3.31	350	348			2	
	Males	46.86	6,034	2.70	164	163			1	
	Females	53.14	4,526	4.11	186	185			1	
Iron a	Totals				117	117				
	Males	50.43			59	59				
	Females	49.57			58	58				
Isabella	Totals		16,011	2.68	429	419	1	1	8	
	Males	47.32	8,597	2.36	203	196		1	6	
	Females	52.68	7,414	3.03	225	223	1		1	
	Unknown				1				1	
Jackson	Totals		45,232	1.55	699	693	3	3		
	Males	51.22	23,385	1.54	358	350	2			
	Females	48.78	21,847	1.56	341	337	1	3		
Kalamazoo	Totals		35,281	1.92	679	675	4			
	Males	50.66	17,875	1.92	344	344				
	Females	49.34	17,406	1.93	335	331	4			
Kalkaska	Totals		4,498	2.25	101	101				
	Males	40.59	2,470	1.66	41	41				
	Females	59.41	2,023	2.96	60	60				
Kent	Totals		84,600	2.65	2,248	2,231	13	4		
	Males	52.22	43,467	2.70	1,174	1,165	7	2		
	Females	47.78	41,133	2.61	1,073	1,065	6	2		
	Unknown				1	1				
Keweenaw	Totals		4,667	2.81	131	131				
	Males	56.49	2,551	2.90	74	74				
	Females	43.51	2,116	2.69	57	57				

a Organized since census was taken.

BIRTHS, BY COUNTIES, BY SEX, BY COLOR.

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TABLE 6.—CONTINUED.—*Births by counties, by sex, and by color.*

Counties.	Sex.	Per cent of births of each sex to total of both sexes.	Population in 1884 represented by births in 1889.	Per cent of births of each sex to population of same sex.	Color—Children born in 1889.					
					Total of all colors.	White.	Black.	Mulatto.	Indian.	Unknown.
Lake	Totals		7,388	1.19	88	88				
	Males	50.00	4,442	.99	44	44				
	Females	50.00	2,946	1.49	44	44				
Lapeer	Totals		30,057	1.76	528	528				
	Males	51.14	15,568	1.73	270	270				
	Females	48.86	14,489	1.78	258	258				
Leelanaw	Totals		7,128	2.85	203	192	1		10	
	Males	57.14	3,842	3.02	116	109	1		6	
	Females	42.86	3,286	2.65	87	83			4	
Lenawee	Totals		49,584	1.36	666	660	4	1		1
	Males	48.32	24,916	1.21	322	320	2			
	Females	51.68	24,668	1.39	343	340	2	1		
	Unknown				1					1
Livingston	Totals		21,568	1.48	319	319				
	Males	52.04	11,254	1.48	166	166				
	Females	47.96	10,314	1.48	153	153				
Luce	Totals				78	77	1			
	Males	53.85			42	41	1			
	Females	46.15			36	36				
Mackinac	Totals		5,171	2.15	111	89			22	
	Males	58.56	2,948	2.20	65	54			b 11	
	Females	41.44	2,223	2.07	46	35			b 11	
Macomb	Totals		31,293	2.20	690	688	2			
	Males	58.62	15,978	2.32	370	369	1			
	Females	46.38	15,315	2.09	320	319	1			
Manistee	Totals		19,875	3.50	685	685				
	Males	55.18	10,879	3.47	378	378				
	Females	44.82	8,996	3.41	307	307				
Manitou	Totals		1,198	2.17	26	26				
	Males	50.00	547	2.37	13	13				
	Females	50.00	456	2.85	13	13				
	Unknown		195							
Marquette	Totals		31,027	3.86	1,198	1,198				
	Males	50.83	17,375	3.51	609	609				
	Females	49.17	13,652	4.31	589	589				

* Organized since census was taken.

b Five males, 8 females, white and Indian.

VITAL STATISTICS OF MICHIGAN, 1889.

TABLE 6.—CONTINUED.—*Births by counties, by sex, and by color.*

Counties.	Sex.	Per cent of births of each sex to total of both sexes.	Population in 1884 represented by births in 1889.	Per cent of births of each sex to population of same sex.	Color—Children born in 1889.					
					Total of all colors.	White.	Black.	Mulatto.	Indian.	Unknown.
Mason	Totals		12,745	3.23	412	407			5	
	Males	51.94	6,936	3.09	214	210			4	
	Females	48.06	5,809	3.41	198	197			1	
Mecosta	Totals		20,597	1.94	409	408	4	2		
	Males	50.61	11,283	1.88	207	204	2	1		
	Females	49.39	9,314	2.16	201	198	2	1		
	Unknown				1	1				
Menominee	Totals		19,120	5.29	1,012	1,011				1
	Males	51.48	11,488	4.54	521	521				
	Females	48.52	7,632	6.26	478	478				
	Unknown				13	12				1
Midland	Totals		8,776	2.61	229	227		2		
	Males	50.22	4,728	2.43	115	114		1		
	Females	49.78	4,048	2.82	114	113		1		
Missaukee	Totals		3,386	3.28	111	111				
	Males	48.65	2,086	2.65	54	54				
	Females	51.35	1,350	4.22	57	57				
Monroe	Totals		33,353	1.84	613	610	2	1		
	Males	53.67	17,186	1.91	329	327	1	1		
	Females	46.33	16,167	1.76	284	283	1			
Montcalm	Totals		35,356	1.74	615	615				
	Males	50.41	18,774	1.65	310	310				
	Females	49.59	16,581	1.24	305	305				
	Unknown		1							
Montmorency	Totals		845	4.97	42	42				
	Males	52.38	494	4.45	22	22				
	Females	47.62	351	5.70	20	20				
Muskegon	Totals		37,554	2.71	1,016	1,016				
	Males	53.05	20,522	2.62	539	539				
	Females	46.95	17,029	2.79	476	476				
	Unknown		3		1	1				
Newaygo	Totals		13,996	1.77	336	336				
	Males	50.89	10,684	1.60	171	171				
	Females	49.11	8,312	1.99	165	165				

TABLE 6.—CONTINUED.—*Births by counties, by sex, and by color.*

Counties.	Sex.	Per cent of births of each sex to total of both sexes.	Population in 1884 represented by births in 1889.	Per cent of births of each sex to population of same sex.	Color—Children born in 1889.					
					Total of all colors.	White.	Black.	Mulatto.	Indian.	Unknown.
Oakland.....	Totals.....		41,100	1.24	511	510	1			
	Males.....	52.25	20,821	1.27	267	267				
	Females.....	47.75	20,279	1.20	243	242	1			
	Unknown.....				1	1				
Oceana.....	Totals.....		14,519	2.03	295	292		1	2	
	Males.....	53.90	7,859	2.02	159	156		1	2	
	Females.....	46.10	6,660	2.04	136	136				
Ogemaw.....	Totals.....		3,637	2.88	105	105				
	Males.....	48.57	2,041	2.50	51	51				
	Females.....	51.43	1,596	3.38	54	54				
Ontonagon.....	Totals.....		4,836	1.08	50	50				
	Males.....	48.00	3,329	.72	24	24				
	Females.....	52.00	1,507	1.73	26	26				
Osceola.....	Totals.....		14,001	2.13	299	299				
	Males.....	49.50	7,533	1.96	148	148				
	Females.....	50.50	6,468	2.33	151	151				
Oscoda.....	Totals.....		1,374	2.40	33	33				
	Males.....	45.45	798	1.88	15	15				
	Females.....	54.55	576	3.12	18	18				
Otsego.....	Totals.....		3,906	1.28	50	49		1		
	Males.....	52.00	2,223	1.17	26	26				
	Females.....	48.00	1,683	1.43	24	23		1		
Ottawa.....	Totals.....		36,225	2.34	849	849				
	Males.....	54.18	18,970	2.42	460	460				
	Females.....	45.82	17,255	2.25	388	388				
	Unknown.....				1	1				
Presque Isle.....	Totals.....		4,064	3.35	136	136				
	Males.....	52.21	2,168	3.27	71	71				
	Females.....	47.79	1,896	3.43	65	65				
Roscommon.....	Totals.....		1,602	1.87	30	30				
	Males.....	60.00	1,044	1.72	18	18				
	Females.....	40.00	558	2.15	12	12				
Saginaw.....	Totals.....		74,795	3.05	2,281	2,273		1	7	
	Males.....	53.00	41,588	2.91	1,209	1,202		1	6	
	Females.....	47.00	33,207	3.22	1,071	1,070			1	
	Unknown.....				1	1				

TABLE 6.—CONTINUED.—*Births by counties, by sex, and by color.*

Counties.	Sex.	Per cent of births of each sex to total of both sexes.	Population in 1884 represented by births in 1889.	Per cent of births of each sex to population of same sex.	Color—Children born in 1889.				
					Total of all colors.	White.	Black.	Mulatto.	Indian.
Sanilac	Totals		29,583	2.62	777	777			
	Males	53.67	15,578	2.68	417	417			
	Females	46.33	14,005	2.57	360	360			
Schoolcraft	Totals		3,846	1.92	74	73			1
	Males	52.70	2,568	1.52	39	38			1
	Females	47.30	1,278	2.74	35	35			
Shiawassee	Totals		28,078	1.54	431	431			
	Males	51.97	14,731	1.53	224	224			
	Females	48.03	13,347	1.55	207	207			
St. Clair	Totals		40,783	2.36	1,102	1,101		1	
	Males	52.54	24,058	2.41	579	579			
	Females	47.46	22,723	2.30	523	522		1	
	Unknown		2						
St. Joseph	Totals		26,377	1.29	341	341			
	Males	53.08	13,295	1.36	181	181			
	Females	46.92	12,982	1.23	160	160			
Tuscola	Totals		30,726	2.00	633	632		1	
	Males	51.97	16,126	2.04	329	328		1	
	Females	48.03	14,600	2.07	303	303			
	Unknown				1	1			
Van Buren	Totals		30,341	1.83	555	543	10	1	1
	Males	50.99	15,377	1.19	288	276	6	1	
	Females	49.01	14,964	1.81	271	267	4		
	Unknown				1				1
Washtenaw	Totals		41,694	1.54	641	635	4	2	
	Males	51.64	21,067	1.57	331	327	2	2	
	Females	48.36	20,627	1.50	310	308	2		
Wayne	Totals		188,966	6.36	12,023	11,852	110	13	48
	Males	52.16	94,492	6.74	6,371	6,280	59	8	24
	Females	47.84	94,474	5.97	5,636	5,559	51	5	21
	Unknown				16	13			3
Wexford	Totals		10,518	2.41	254	254			
	Males	52.36	5,732	2.32	133	133			
	Females	47.64	4,786	2.53	121	121			

The nativity of parents of children born in 1889 is shown in Table 7. It will be seen that the foreign parents nearly equal the native parents. The native parents include all those born in the United States, and comprise 41.77 per cent of the total for the present year, while for 1888 they were 44.01. The foreign parents comprise 38.95 per cent for the present year, and 36.34 per cent for 1888.

TABLE 7.—*Showing, by sex, the parent nativity of children born in Michigan during the year 1889, according to the returns.*

Nativity of Parents of children born, 1889.	Total births, 1889.							
	Number.				Per cent of total.			
	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.
All nativities.....	49,272	25,642	23,582	48	100.00	100.00	100.00	100.00
Both parents native born.....	20,579	10,726	9,841	12	41.77	41.83	41.73	25.00
Both parents foreign born.....	19,189	10,041	9,124	24	38.95	39.20	39.11	50.00
Foreign father and native mother.....	5,254	2,678	2,574	2	10.66	10.41	10.92	4.17
Foreign mother and native father.....	2,952	1,544	1,408	.....	5.99	6.02	5.97	.....
Unknown mother, father native.....	143	68	75	.....	.29	.27	.32	.....
Unknown mother, father foreign.....	116	52	64	.....	.23	.20	.27	.....
Unknown father, mother native.....	206	98	108	.....	.42	.38	.46	.....
Unknown father, mother foreign.....	97	52	45	.....	.20	.20	.19	.....
Both unknown.....	736	383	343	10	1.49	1.49	1.03	20.88
One or both native.....	29,134	15,114	14,006	14	59.13	58.94	59.39	29.17
One or both foreign.....	27,608	14,367	13,215	26	56.00	56.03	56.04	54.17

Table 8 gives the nativity of parents for 1887 and 1889 inclusive, with the average for the ten years, 1879-1888. It will be seen that the per cent of native parents for 1889 is the lowest of that for any year included in the table, and also lower than the ten years average. The per cent of the foreign born for 1889 is higher than in any of the years, and higher than ten years average. In 1888 the excess of children born of native parents over foreign parentage was 3,751. In 1889 the excess was only 1,390.

TABLE 8.—*Parent nativity of children born in Michigan for each of the years 1887-1889, and the average for ten years, 1879-1888.*

Nativity of parents of children born.		1887.		1888.		1889.		Average for 10 Years, 1879-1888.	
		Number	Per cent of total.	Number	Per cent of total.	Number	Per cent of total.	Number	Per cent of total.
All nativities		46,226	100.00	48,952	100.00	49,272	100.00	41,889	100.00
Both native born		19,881	43.01	21,542	44.01	20,579	41.77	17,626	43.97
Both foreign born		17,077	36.94	17,791	36.34	19,189	38.95	15,632	35.74
Foreign father and native mother		5,058	10.94	5,136	10.49	5,254	10.66	4,509	11.26
Foreign mother and native father		3,001	6.49	2,972	6.07	2,952	5.99	2,478	6.18
One or both unknown		1,209	2.62	1,511	3.09	1,298	2.63	1,144	2.85
One or both parents native *		27,940	60.44	29,650	60.56	28,785	58.42	24,687	61.59
One or both parents foreign *		25,186	54.38	25,899	52.91	14,268	28.95	21,344	53.25
Father	Native	23,039	49.84	24,643	50.34	23,674	48.05	19,950	49.77
	Foreign	22,220	48.07	23,001	46.99	24,559	49.84	18,917	47.19
	Unknown	967	2.09	1,308	2.67	1,039	2.11	915	2.28
Mother	Native	25,157	54.42	26,876	54.91	26,089	52.85	22,330	55.71
	Foreign	20,174	43.64	20,856	42.60	22,288	45.13	16,892	42.15
	Unknown	895	1.94	1,220	2.49	995	2.02	861	2.15

* Excluding cases where nativity of either parent is unknown.

The nativity of parents of children born in 1889 is given in Table 9 for every county in the State. The number of parents whose nativity was unknown is given as 736. The unknown for 1888 was 1,017.

TABLE 9.—*Exhibiting, for the State and counties of Michigan, by sex, the parent nativity of children returned for the year 1889. (Still births included.)*

State and counties.	Sex.	Children born 1889.	Nativity of parents of children born,—1889.								Both unknown.
			Both native-born.	Both foreign-born.	Foreign father and native mother.	Foreign mother and native father.	Mother unknown.		Father unknown.		
							Father.		Mother.		
							Native.	Foreign.	Native.	Foreign.	
State	Totals	49,272	20,579	19,189	5,254	2,952	143	116	206	97	736
	Males	25,642	10,726	10,041	2,678	1,544	68	52	98	52	383
	Females	23,582	9,841	9,124	2,574	1,408	75	64	108	45	343
	Unknown	48	12	24	2						10
Alcona	Totals	67	12	29	15	11					
	Males	34	8	16	7	3					
	Females	33	4	13	8	8					
Alger	Totals	19	4	12	2				1		
	Males	7	2	4					1		
	Females	12	2	8	2						
Allegan	Totals	773	543	102	79	41	1		4		3
	Males	385	275	57	32	18			2		1
	Females	388	268	45	47	23	1		2		2
Alpena	Totals	525	52	370	45	39		1	5		13
	Males	273	30	189	25	23		1	4		6
	Females	247	22	181	20	16			1		7
Antrim	Totals	214	99	64	27	21			2		1
	Males	119	53	38	14	12			1		1
	Females	95	46	26	13	9			1		
Arenac	Totals	141	30	75	24	12					
	Males	72	14	39	14	5					
	Females	69	16	36	10	7					
Baraga	Totals	105	36	59	6	1		1		1	1
	Males	63	18	40	2			1		1	1
	Females	42	18	19	4	1					
Barry	Totals	464	394	26	25	16			1	1	1
	Males	219	188	12	11	7					1
	Females	245	206	14	14	9			1	1	

[illegible]

BIRTHS, BY COUNTIES, PARENT NATIVITY, AND BY SEX.

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TABLE 9.—CONTINUED.—*Births by counties, parent nativity and sex.*

Counties.	Sex.	Children born, 1889.	Nativity of parents of children born,—1889.								Both unknown.
			Both native born.	Both foreign born.	Foreign father and native mother.	Foreign mother and native father.	Mother unknown.		Father unknown.		
							Father.		Mother.		
							Native.	Foreign.	Native.	Foreign.	
Crawford.....	Totals.....	54	18	24	4	5			1		2
	Males.....	28	10	12	3	2					1
	Females.....	26	8	12	1	3			1		1
Delta.....	Totals.....	489	98	256	79	25	5	13		5	8
	Males.....	267	59	132	46	12	4	6		3	5
	Females.....	219	39	122	32	13	1	7		2	3
	Unknown.....	3		2	1						
Eaton.....	Totals.....	482	429	8	21	15	2		5		2
	Males.....	239	213	3	11	9			2		1
	Females.....	243	216	5	10	6	2		3		1
Emmet.....	Totals.....	156	75	49	9	6	1	1	1		14
	Males.....	89	43	28	2	6	1		1		8
	Females.....	66	32	21	7			1			5
	Unknown.....	1									1
Genesee.....	Totals.....	548	362	70	58	49			3	1	5
	Males.....	295	185	36	37	30			2	1	4
	Females.....	253	177	34	21	19			1		1
Gladwin.....	Totals.....	35	9	14	7	5					
	Males.....	12	3	4	2	3					
	Females.....	23	6	10	5	2					
Gogebic.....	Totals.....	303	57	176	30	21	1	9	1		8
	Males.....	169	35	94	18	11	1	6			4
	Females.....	134	22	82	12	10		3	1		4
Grand Traverse.....	Totals.....	195	106	49	30	10					
	Males.....	114	57	31	21	5					
	Females.....	81	49	18	9	5					
Gratiot.....	Totals.....	500	410	27	36	25					2
	Males.....	264	212	14	22	15					1
	Females.....	236	198	13	14	10					1
Hillsdale.....	Totals.....	348	323	8	8	7			2		
	Males.....	188	172	5	6	4			1		
	Females.....	160	151	3	2	3			1		
Houghton.....	Totals.....	1,324	209	933	126	33		2	4	3	14
	Males.....	658	109	469	62	11				2	5
	Females.....	666	100	464	64	22		2	4	1	9

TABLE 9.—CONTINUED.—*Births by counties, parent nativity and sex.*

Counties	Sex.	Children born, 1889.	Nativity of parents of children born,—1889.								
			Both native born.	Both foreign born.	Foreign father and native mother.	Foreign mother and native father.	Mother unknown.		Father unknown.		Both unknown.
							Father.		Mother.		
							Native.	Foreign.	Native.	Foreign.	
Huron	Totals	805	143	431	152	72	1	1	2		3
	Males	404	68	211	81	39	1		1		3
	Females	401	75	220	71	33		1	1		
Ingham	Totals	561	365	92	33	37	10	1	8	1	14
	Males	284	198	51	8	20	4		3		5
	Females	274	170	40	25	17	6	1	5	1	9
	Unknown	3	2	1							
Ionia	Totals	537	396	46	55	22	3	2	8	1	4
	Males	279	199	28	28	15		2	4		3
	Females	258	197	18	27	7	3		4	1	1
Iosco	Totals	350	56	206	30	29	2	2		2	23
	Males	164	29	91	11	14	2	1		2	14
	Females	186	27	115	19	15		1			9
Iron	Totals	117	23	82	9	3					
	Males	59	9	44	5	1					
	Females	58	14	38	4	2					
Isabella	Totals	429	237	102	57	25	2	1	3		2
	Males	203	117	48	26	8	1		1		2
	Females	225	119	54	31	17	1	1	2		
	Unknown	1	1								
Jackson	Totals	699	465	115	70	30	3	2	5	2	7
	Males	358	245	49	41	14	2		3	1	3
	Females	341	220	66	29	16	1	2	2	1	4
Kalamazoo	Totals	679	424	149	58	35	3	2	3	1	4
	Males	344	211	75	32	19	2	2	2		1
	Females	335	213	74	26	16	1		1	1	3
Kalkaska	Totals	101	66	8	17	8					2
	Males	41	30	2	3	5					1
	Females	60	36	6	14	3					1
Kent	Totals	2,248	906	904	216	136	5	9	10	3	59
	Males	1,174	476	474	110	67	2	4	7	1	33
	Females	1,073	430	429	106	69	3	5	3	2	26
	Unknown	1		1							

TABLE 9.—CONTINUED.—*Births by counties, parent nativity and sex.*

Counties.	Sex.	Children born, 1889.	Nativity of parents of children born,—1889.								Both unknown.
			Both native born.	Both foreign born.	Foreign father and native mother.	Foreign mother and native father.	Mother unknown.		Father unknown.		
							Father.		Mother.		
							Native.	Foreign.	Native.	Foreign.	
Keweenaw	Totals	131	16	87	27	1					
	Males	74	8	47	18	1					
	Females	57	8	40	9						
Lake	Totals	88	40	29	11	8					
	Males	44	22	15	3	4					
	Females	44	18	14	8	4					
Lapeer	Totals	528	232	134	90	68					4
	Males	270	112	70	47	40					1
	Females	258	120	64	43	28					3
Leelanaw	Totals	203	86	59	34	20			2		2
	Males	116	52	36	11	14			1		2
	Females	87	34	23	23	6			1		
Lenawee	Totals	666	498	88	36	28	1		4		11
	Males	322	255	37	13	8			3		6
	Females	343	243	51	23	20	1		1		4
	Unknown	1									1
Livingston	Totals	319	245	25	30	15					4
	Males	166	126	9	17	10					4
	Females	153	119	16	13	5					
Luce	Totals	78	11	49	4	7				1	6
	Males	42	8	24	3	2				1	
	Females	36	3	25	1	5					2
Mackinac	Totals	111	47	44	11	7			1		1
	Males	65	27	30	4	4					
	Females	46	20	14	7	3			1		
Macomb	Totals	690	377	154	96	58		1	2	2	
	Males	370	211	77	52	28				2	
	Females	320	166	77	44	30		1	2		
Manistee	Totals	685	115	491	45	29		1	3	1	
	Males	378	64	273	25	15		1			
	Females	307	51	218	20	14			3	1	
Manitou	Totals	26	5	12	6	3					
	Males	13	2	6	5						
	Females	13	3	6	1	3					

TABLE 9.—CONTINUED.—*Births by counties, parent nativity, and sex.*

Counties.	Sex.	Children born, 1889.	Nativity of parents of children born,—1889.								
			Both native born.	Both foreign born.	Foreign father and native mother.	Foreign mother and native father.	Mother unknown.		Father unknown.		Both unknown.
							Father.		Mother.		
							Native.	Foreign.	Native.	Foreign.	
Marquette	Totals	1,198	119	943	75	51			2	4	4
	Males	609	59	482	34	27			1	3	3
	Females	589	60	461	41	24			1	1	1
Mason	Totals	412	131	206	46	22			5	1	1
	Males	214	68	105	24	14			3		
	Females	198	63	101	22	8			2	1	1
Mecosta	Totals	409	202	123	43	30			6		5
	Males	207	109	61	19	12			3		3
	Females	201	93	61	24	18			3		2
	Unknown	1		1							
Menominee	Totals	1,012	140	689	113	32		2	1	1	34
	Males	521	80	353	50	19		1		1	17
	Females	478	60	325	62	13		1	1		16
	Unknown	13		11	1						1
Midland	Totals	229	106	68	30	23			1	1	
	Males	115	53	33	16	12				1	
	Females	114	53	35	14	11			1		
Missaukee	Totals	111	31	59	15	5					1
	Males	54	17	26	8	3					
	Females	57	14	33	7	2					1
Monroe	Totals	613	469	51	57	22	2	2	8		2
	Males	329	244	30	34	14	2	1	3		1
	Females	284	225	21	23	8		1	5		1
Montcalm	Totals	615	353	133	68	37	2		5	3	9
	Males	310	174	72	32	21			3	3	5
	Females	305	179	66	36	16	2		2		4
Montmorency	Totals	42	15	17	4	6					
	Males	22	4	11	3	4					
	Females	20	11	6	1	2					
Muskegon	Totals	1,016	270	574	102	56	3	2		3	6
	Males	539	150	308	48	27	1	2		1	2
	Females	476	119	266	54	29	2			2	4
	Unknown	1	1								

TABLE 9.—CONTINUED.—*Births by counties, parent nativity, and sex.*

Counties.	Sex.	Children born, 1889.	Nativity of parents of children born,—1889.								Both unknown.
			Both native born.	Both foreign born.	Foreign father and native mother.	Foreign mother and native father.	Mother unknown.		Father unknown.		
							Father.		Mother.		
							Native.	Foreign.	Native.	Foreign.	
Newaygo	Totals.....	336	184	85	38	21	1		1		6
	Males.....	171	90	47	21	8	1				4
	Females.....	165	94	38	17	13			1		2
Oakland	Totals.....	511	343	59	48	47	6	2	3		3
	Males.....	267	177	32	27	25	4	1			1
	Females.....	243	165	27	21	22	2	1	3		2
	Unknown.....	1	1								
Oceana	Totals.....	295	181	48	29	27			4		6
	Males.....	159	99	22	14	18			3		3
	Females.....	136	82	26	15	9			1		3
Ogemaw	Totals.....	105	38	38	14	12			2	1	
	Males.....	51	18	21	6	6					
	Females.....	54	20	17	8	6			2	1	
Ontonagon	Totals.....	50	27	16	4	1			1		1
	Males.....	24	12	8	2	1			1		
	Females.....	26	15	8	2						1
Osceola	Totals.....	299	129	103	36	30	1				
	Males.....	148	60	52	18	17	1				
	Females.....	151	69	51	18	13					
Oscoda	Totals.....	33	14	5	3	3		1			7
	Males.....	15	5	4	3	2					1
	Females.....	18	9	1		1		1			6
Otsego	Totals.....	50	20	16	8	2	1				3
	Males.....	26	10	9	3	1					
	Females.....	24	10	7	5	1	1				
Ottawa	Totals.....	849	367	291	102	69	4	2	8		6
	Males.....	460	194	167	55	32	3	1	3		5
	Females.....	388	173	123	47	37	1	1	5		1
	Unknown.....	1		1							
Presque Isle	Totals.....	136	10	119	4	2				1	
	Males.....	71	6	64	1						
	Females.....	65	4	55	3	2				1	

TABLE 9.—CONTINUED.—*Births by counties, parent nativity, and sex.*

Counties.	Sex.	Children born, 1889.	Nativity of parents of children born,—1889.								Both unknown.
			Both native born.	Both foreign born.	Foreign father and native mother.	Foreign mother and native father.	Mother unknown.		Father unknown.		
							Father.		Mother.		
							Native.	Foreign.	Native.	Foreign.	
Roscommon.....	Totals.....	30	10	13	3	4					
	Males.....	18	7	6	3	2					
	Females.....	12	3	7		2					
Saginaw.....	Totals.....	2,281	752	932	374	175	2	4	18	9	15
	Males.....	1,209	411	487	200	84	1		10	7	9
	Females.....	1,071	340	445	174	91	1	4	8	2	6
	Unknown.....	1	1								
Sanilac.....	Totals.....	777	171	366	153	84			2	1	
	Males.....	417	92	203	77	45					
	Females.....	360	79	163	76	39			2	1	
Schoolcraft.....	Totals.....	74	21	41	10	2					
	Males.....	39	9	24	5	1					
	Females.....	35	12	17	5	1					
Shiawassee.....	Totals.....	431	277	57	53	33	2	1	3		5
	Males.....	224	141	33	26	15	2	1	1		5
	Females.....	207	136	24	27	18			2		
St. Clair.....	Totals.....	1,102	388	358	198	110	5	8	6	7	23
	Males.....	579	199	193	108	58	3	5	3	4	6
	Females.....	523	189	165	90	52	2	3	3	3	16
St. Joseph.....	Totals.....	341	252	35	18	18	6		5		7
	Males.....	181	128	23	13	10	2		1		4
	Females.....	160	124	12	5	8	4		4		3
Tuscola.....	Totals.....	633	297	158	92	71		2	3	2	8
	Males.....	329	163	75	45	39		1	1	1	4
	Females.....	303	133	83	47	32		1	2	1	4
	Unknown.....	1	1								
Van Buren.....	Totals.....	555	461	24	39	21		1	2		7
	Males.....	283	234	12	21	11			1		4
	Females.....	271	226	12	18	10		1	1		3
	Unknown.....	1	1								
Washtenaw.....	Totals.....	641	361	128	58	42	4		2		46
	Males.....	331	175	70	29	22	3		1		31
	Females.....	310	186	58	29	20	1		1		15

TABLE 9.—CONTINUED.—*Births by counties, parent nativity, and sex.*

Counties.	Sex.	Children born, 1889.	Nativity of parents of children born,—1889.								
			Both native born.	Both foreign born.	Foreign father and native mother.	Foreign mother and native father.	Mother unknown.		Father unknown.		Both unknown.
							Father.		Mother.		
							Native.	Foreign.	Native.	Foreign.	
Wayne	Totals.....	12,023	3,767	6,144	1,123	583	45	35	21	29	276
	Males.....	6,371	2,021	3,260	573	326	17	14	12	13	135
	Females.....	5,638	1,743	2,877	550	257	28	21	9	16	135
	Unknown.....	16	3	7							6
Wexford	Totals.....	254	109	99	25	21					
	Males.....	133	50	55	16	12					
	Females.....	121	59	44	9	9					

TWIN CHILDREN, 1889.

There were 1,054 twin children born in 1889. Of these 547 were males, and 507 were females. In 1888 there were 1,166 twin children, 617 males and 549 females. Beginning with the month having the most twin births, the table gives the births for the year, with the proportion of the sexes, showing a slight increase in the number of males to females over last year, there being 113 males to every one hundred females in 1889, and 112 males to every one hundred females in 1888.

TABLE 10—*Exhibiting, by sex, the number of pairs of twins and twin children returned for the year 1889.*

Year and Month, 1889.		No. of twin children, 1889.				No. of pairs of twins, 1889.				
		Totals.	Males.	Females.	Males to 100 females.	Totals.	Males.	Females.	One of each sex.	Males to 100, one of each sex.
Year, 1889.....		1,054	a 547	b 507	107	527	174	154	199	87
More than the Average No. of Twins.	October.....	118	63	55	114	59	20	16	23	87
	April.....	106	53	53	100	53	15	15	23	65
	July.....	102	60	42	143	51	20	11	20	100
	May.....	96	51	45	113	48	16	13	19	84
	June.....	90	48	42	114	45	18	15	12	150
Average.....		88	46	42	109	44	15	13	16	94
Less than the Average No. of Twins.	January.....	86	54	32	169	43	19	8	16	113
	March.....	84	40	44	90	42	15	17	10	150
	September.....	82	49	33	148	41	18	10	13	138
	August.....	78	36	42	86	39	11	14	14	79
	November.....	76	30	46	65	38	7	15	16	44
	February.....	68	27	41	66	34	5	12	17	29
	December.....	68	36	32	113	34	10	8	16	63

a Includes 36 still-born, 7 black, 4 Mulatto and 1 illegitimate.

b Includes 27 still-born, 3 black, 4 Mulatto, 2 Indian, and 3 illegitimate.

Table 11 gives the parent-nativity of the twin children born during the year 1889. The large number of plural births of foreign nativity is the most conspicuous feature of the table. While the number is not as high as it was in 1888, the proportion between the two classes of native and foreign is considerably changed; there being 238 native and 257 foreign in 1888, and 199 native and 240 foreign plural births in 1889, a difference of 19 in 1888, and of 41 in 1889. Comparing the evidence in this table with that given in table 7, it will be observed that the proportion of twins born of foreign parents was greater than that for all children born, while the reverse is true in regard to the native-born. All of this tends to show that there is a larger twin birth-rate among the foreign-born parents than among the native, and as the statistics of former years also bear the same testimony, it seems to be quite conclusive.

TABLE 11.—*Parent nativity of twins returned in Michigan for 1889.*

Nativity of parents of twins, 1889.	Pairs of twins, 1889.							
	Number.				Per ct. of each parent nativity to total of all nativities.			
	Totals.	Males.	Females.	One of each.	Totals.	Males.	Females.	One of each.
All nativities.....	527	174	154	199	100.00	100.00	100.00	100.00
Both native born.....	199	71	61	67	37.76	40.80	39.61	33.67
Both foreign born.....	240	71	70	99	45.54	40.80	45.46	49.75
Foreign father and native mother.....	52	20	11	21	9.87	11.50	7.14	10.55
Foreign mother and native father.....	34	12	11	11	6.45	6.90	7.14	5.53
Unknown mother, father native.....								
Unknown mother, father foreign.....								
Unknown father, mother native.....	1			1	.19			.50
Unknown father, mother foreign.....								
Both unknown.....	1		1		.19		.65	
One or both native.....	286	103	83	100	54.27	59.20	58.90	50.25
One or both foreign.....	240	103	92	131	45.73	40.80	41.10	49.75

The proportion of twin births by nativity and color of mothers for each of the years 1887, 1888 and 1889, and the average for ten years 1879-1888 is given in table 12, which bears out the evidence concerning the nativity of mothers of twins given in Table 11.

TABLE 12.—By nativity and color of mothers, the number and proportion of twin births returned for the years 1887-1888 and the average for ten years, 1879-1888.

Nativity and color of mothers of twins, 1887-1889.	1887.			1888.			1889.			Average for 10 years, 1879-1888.		
	Number of pairs of twins.	Whole No. of mothers including those of twins.	Per cent of births of twins to all mothers.	Number of pairs of twins.	Whole No. of mothers including those of twins.	Per cent of births of twins to all mothers.	Number of pairs of twins.	Whole No. of mothers including those of twins.	Per cent of births of twins to all mothers.	Number of pairs of twins.	Whole No. of mothers including those of twins.	Per cent of births of twins to all mothers.
Mothers of all colors and all nativities	528	45,688	1.16	583	48,350	1.20	527	48,727	1.08	457	39,613	1.15
All native born mothers	271	24,880	1.09	286	26,582	1.07	252	25,775	.98	243	22,081	1.10
All foreign born mothers	245	19,925	1.23	288	20,557	1.40	274	21,958	1.25	206	16,680	1.24
Mothers of unknown nativities	12	888	1.36	9	1,211	.74	1	994	.10	8	852	.94
White	513	45,127	1.10	577	47,867	1.20	517	48,299	1.07	450	39,209	1.15
Black	10	254	3.94	1	234	.43	5	201	2.49	3	145	2.07
Mulatto	1	67	1.49	1	106	.94	4	65	6.15	2	95	2.10
Indian	3	113	2.65	4	126	3.17	1	109	.91	2	121	1.65
Unknown	1	127	.79		17			53			43	
Black and Mulatto	11	321	3.43	2	340	.58	9	266	3.38	5	240	2.08

Table 13 gives the record of the births of triplet children, of which there were six cases during the year 1889. The native born parents in this instance outnumber the foreign born parents. In the sex of the children born, the males as usual are in excess of the females.

TABLE 13.—Exhibiting certain details concerning triplet children returned for the year 1889.

Counties.	Triplet children, 1889.					Parents of triplets.		
	Month of birth, 1889.	Color.	Sex.			Birthplace of father.	Birthplace of mother.	Occupation of father.
			Male	Females	Unknown.			
Berrien	May	White	2	1		Ohio	Indiana	Laborer.
Jackson	Dec.	White	3			Michigan	Michigan	Fireman.
Kalamazoo	Sept.	White	2	1		Pennsylvania	Michigan	Farmer.
Oakland	Nov.	White	* 2	* 2		Michigan	New York	Farmer.
Ottawa	July	White			* 3	Netherlands	Netherlands	Laborer.
Saginaw	March	White	3			New Brunswick	Canada	Molder.

* All still born.

In Table 14 may be seen the number of pairs of twins and sets of triplets returned for each of the years 1876-1889, also the average for these years. It appears from the facts here presented that the proportion of twin births to single births does not vary materially in the course of a series of years, there being about 88 single births to each pair of twins.

TABLE 14.—*Exhibiting the number of pairs of twins and cases of triplets returned in Michigan for the 14 years, 1876-1889, and the average for these years.*

Years.	Pairs of twins.	Cases of triplets.	No. of births to one pair of twins.	No. of births to one case of triplets.
1876	428	8	80	4,279
1877	367	91	91	33,895
1878	427	8	82	11,721
1879	402	2	85	17,061
1880	358	5	99	7,085
1881	372	5	93	6,950
1882	430	9	86	4,114
1883	466	9	88	4,534
1884	450	4	90	10,102
1885	481	7	88	6,017
1886	501	6	82	6,849
1887	528	5	88	9,245
1888	583	8	84	6,119
1889	527	6	98	8,212
Average	451	5	88	96.90

The statistics of plural births for fourteen years past, classified according to the parent nativity, are given in Table 15. It will be seen that the per cent of native parents is lower for 1889 than for any of the fourteen years included in the table, and that the per cent of foreign parents is higher than ever before.

TABLE 15.—*Exhibiting the parent nativity of plural births returned in Michigan for the fourteen years, 1876-1889.*

Years.	Totals.	Native born.		Foreign born.		Mixed.		Unknown.	
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
1876.....	880	391	44.43	322	36.59	143	16.25	24	2.73
1877.....	734	334	45.51	252	34.33	122	16.62	26	3.54
1878.....	863	402	46.58	291	33.72	142	16.45	28	3.25
1879.....	810	374	46.17	236	29.14	188	23.21	12	1.48
1880.....	731	341	46.65	276	37.75	104	14.23	10	1.37
1881.....	759	355	46.77	270	35.57	124	16.34	10	1.32
1882.....	887	350	39.46	358	40.36	153	17.25	26	2.93
1883.....	959	417	43.48	364	37.96	150	15.64	28	2.92
1884.....	912	360	39.47	396	43.42	144	15.79	12	1.32
1885.....	983	384	39.06	414	42.12	155	15.77	30	3.05
1886.....	1,020	419	41.08	407	39.90	176	17.26	18	1.76
1887.....	1,071	448	41.83	423	39.49	168	15.69	32	2.99
1888.....	1,194	485	40.62	590	44.39	159	13.32	20	1.67
1889.....	1,072	410	38.25	486	45.34	172	16.04	4	0.37
Average.....	920	391	42.81	359	38.58	151	16.42	20	2.19

STILL BIRTHS, 1889.

The returns for 1889, as given in Table 16, show that there were 1,202 still births during the year, of which 692 were males, 483 females, and 27 of which the sex was not given. This is less than the number returned for 1888, which was 1,358, and more than for 1887, when only 807 still births were reported.

TABLE 16.—*The relation of still births to all births and the relation of mothers of still born children to all mothers returned for the years 1886-1889, and the average for ten years, 1879-1888.*

Children and mothers.	Total births and still births.				
	1886.	1887.	1888.	1889.	Average for 10 years, 1879-1888.
All children born.....	41,095	46,236	43,952	49,272	41,389
Still born children.....	909	897	1,358	1,202	824
Per cent of still born to total ..	2.21	1.94	2.77	2.43	2.21
All mothers.....	40,582	45,638	43,350	48,727	39,613
Mothers of still born children.....	880	869	1,322	1,167	871
Per cent of mothers of still born children to all mothers ..	2.17	1.90	2.73	2.39	2.18

The facts concerning the nativity and color of the mothers of still born children may be learned in Table 17. The percentage of native born mothers is again the lowest, not only for each year of the table, but also for the ten year average. The black and Mulatto mothers continue to have the highest per cent, while the Indian mothers have the lowest, there being none for 1889.

TABLE 17.—*By nativity and color, the number and proportion of mothers having still births, for the year 1887-1889, and the average for ten years, 1879-1888.*

Nativity and color of mothers.	1887.			1888.			1889.			Average for 10 years, 1879-1888.		
	Mothers having still births.	Whole No. of moth- ers, including those of still births.	Per cent of mothers of still births to all mothers.	Mothers having still births.	Whole No. of moth- ers, including those of still births.	Per cent of mothers of still births to all mothers.	Mothers having still births.	Whole No. of moth- ers, including those of still births.	Per cent of mothers of still births to all mothers.	Mothers having still births.	Whole No. of moth- ers, including those of still births.	Per cent of mothers of still births to all mothers.
Mothers of all colors and all nativities.....	869	45,688	1.90	1,322	48,350	2.73	1,167	48,727	2.39	871	39,613	2.20
All native born mothers.....	408	24,880	1.64	604	26,582	2.27	512	25,570	2.00	404	22,081	1.83
All foreign born mothers.....	367	19,925	1.84	539	20,557	2.62	495	21,861	2.26	346	16,680	2.07
Mothers of un- known nativ- ities.....	94	883	10.65	179	1,211	14.78	160	1,296	12.35	121	852	14.20
White.....	849	45,127	1.88	1,288	47,867	2.69	1,141	48,299	2.36	848	39,209	2.16
Black.....	12	254	4.72	17	284	7.26	19	201	9.45	8	145	5.52
Mulatto.....		67		6	106	5.66	3	65	4.62	3	95	3.16
Indian.....	4	113	3.54	3	126	2.38		109		2	121	1.65
Unknown.....	4	127	3.15	8	17	47.06	4	53	7.55	10	48	23.26
Black and Mulatto.....	12	321	3.74	23	340	6.76	22	266	8.27	11	240	4.58

Table 18 gives the nativity of parents of still born children for the year 1889. A comparison of the tables relating to still births will show that while the foreign born mothers are more productive than the native mothers, yet a large proportion of their children are still born.

TABLE 18.—*Parent nativity of still born children returned for the year 1889.*

Nativity of parents of still born children, 1889.	Still born children, 1889.							
	Number.				Per cent of each parent nativity to total of all nativities.			
	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.
All nativities.....	1,202	692	488	27	100.00	100.00	100.00	100.00
Both native born	413	240	171	2	34.36	34.68	35.40	7.41
Both foreign born.....	472	267	188	17	39.27	38.56	38.92	62.96
Foreign father and native mother.....	99	63	34	2	8.24	9.10	7.04	7.41
Foreign mother and native father.....	58	40	18	-----	4.83	5.79	3.73	-----
Unknown mother, father native.....	1	-----	1	-----	.08	-----	.21	-----
Unknown mother, father foreign.....	4	3	1	-----	.33	.43	.21	-----
Unknown father, mother native.....	12	7	5	-----	1.00	1.01	1.04	-----
Unknown father, mother foreign.....	4	2	2	-----	.33	.29	.41	-----
Both unknown.....	139	70	68	6	11.56	10.12	13.04	22.22
One or both native.....	583	350	229	4	48.50	50.58	45.34	14.81
One or both foreign.....	637	375	243	19	52.16	54.19	50.81	70.37

PARENT NATIVITY OF STILL BIRTHS.

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TABLE 19.—*Exhibiting by sex, the parent nativity, and by sex and months, the number of still births returned in Michigan for the year 1889.*

Sex of still births, 1889.	Year, 1889.	Months, 1889.												Nativity of parents of still births, 1889.											
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.	Foreign.	Foreign father and native mother.	Foreign mother and native father.	Mother unknown.		Father unknown.		Both unknown.			
		Totals	Males	Females	Unknown	a	b	c	d	e	f	g	h	i				j	k	l	m		n	o	p
Totals	a 1,302	82	70	109	102	77	95	94	102	107	117	114	129	4	413	472	99	58	1	4	12	4	139		
Males	b 692	46	41	61	59	44	42	58	61	68	68	71	70	3	240	267	63	40	---	3	7	2	70		
Females	c 483	34	28	46	42	32	50	32	41	35	47	40	56	---	171	188	34	18	1	1	5	2	63		
Unknown	d 27	2	1	2	1	1	3	4	---	4	2	3	3	1	2	17	2	---	---	---	---	---	6		

a Includes 7 pairs and 12 half pairs of male twins; 5 pairs and 10 half pairs female twins; 13 pairs one of each sex.

b Includes 684 white, 6 black, 2 mulatto and 5 illegitimate.

c Includes 467 white, 13 black, 2 mulatto and 1 unknown.

d Includes 25 white and 2 unknown color.

In Table 20 may be seen the proportion of male to female children among those born alive, the still births and illegitimates. While in all other cases the males born are in excess of the females, yet in the illegitimates the females are in excess, there being five more females than males for 1889, and for 1888 there were 28 more females than males.

TABLE 20.—*Exhibiting the proportion of males to females among children born alive, still births and illegitimates.*

		1888.	1889.	Average for 10 years, 1879-1888.
Born alive.....	Males.....	24,717	24,950	22,155
	Females.....	22,967	23,099	20,627
	Unknown.....	10	21	29
Males to 100 females.....		108	108	107
Still born.....	Males.....	809	692	474
	Females.....	534	488	328
	Unknown.....	15	27	38
Males to 100 females.....		151	148	144
Illegitimate.....	Males.....	298	200	157
	Females.....	298	219	159
	Unknown.....		2	2
Males to 100 females.....		98	91	98

ILLEGITIMATE CHILDREN, 1889.

The number of illegitimate births returned for 1889 was 421, a considerable decrease from 1888 when there were recorded 591 such births, but which was the most ever recorded in the history of the registration. These births represent a ratio of 8.48 to each one thousand of the whole number of births of the State.

TABLE 21.—*The relation of illegitimate children to all children born for the years 1886-1889, and the average for 10 years, 1879-1888.*

Children and mothers.	Total births and illegitimates.				
	1886.	1887.	1888.	1889.	Av. for 10 years, 1879-1888.
All children born.....	41,095	46,226	48,952	49,272	41,389
Illegitimate children.....	300	422	591	421	346
Per cent of illegitimates to total.....	.73	.91	1.20	.84	.86
All mothers.....	40,582	45,688	48,850	48,727	39,618
Mothers of illegitimate children.....	297	418	590	419	343
Per cent of mothers of illegitimates to all mothers.....	.73	.91	1.22	.84	.86

In Table 22 are presented the statistics concerning the nativity and color of mothers of illegitimate children for several years. The proportion of white mothers is seen to be the lowest in every case. The highest proportion for 1889 is the Mulatto.

TABLE 22.—*By nativity and color, the number and proportion of mothers of illegitimates returned for the years 1887-1889, and the average for ten years, 1879-1888.*

Nativity and color of mothers.	1887.			1888.			1889.			Average for 10 years, 1879-1888.		
	Mothers having illegitimates.	Whole number of mothers including those of illegitimates.	Per cent of mothers of illegitimates to all mothers.	Mothers having illegitimates.	Whole number of mothers including those of illegitimates.	Per cent of mothers of illegitimates to all mothers.	Mothers having illegitimates.	Whole number of mothers including those of illegitimates.	Per cent of mothers of illegitimates to all mothers.	Mothers having illegitimates.	Whole number of mothers including those of illegitimates.	Per cent of mothers of illegitimates to all mothers.
Mothers of all colors and all nativities.....	418	45,688	.91	590	48,350	1.22	419	48,727	.86	344	39,613	.87
All native born mothers.....	150	24,880	.60	149	26,582	.56	126	25,775	.49	141	22,081	.64
All foreign born mothers.....	70	19,925	.35	71	20,557	.34	73	21,958	.33	76	16,680	.46
Mothers of unknown nativities.....	198	883	22.42	370	1,211	30.55	220	994	22.13	127	852	14.91
White.....	319	45,127	.71	571	47,867	1.19	404	48,299	.84	318	39,209	.81
Black.....	10	254	3.93	12	234	5.12	7	201	3.48	7	145	4.83
Mulatto.....	7	67	10.45	2	106	1.88	4	65	6.15	4	95	4.21
Indian.....	8	113	7.08	5	126	3.96	2	109	1.83	7	121	5.79
Unknown.....	74	127	58.27	.....	17	.....	2	63	3.18	8	43	18.60
Black and Mulatto.....	17	321	5.30	14	340	4.11	11	266	4.14	11	239	4.60

TABLE 23.—*Exhibiting by sex, the number by months, and the nativity of parents of illegitimates returned for the year 1889.*

Sex of illegitimates, 1889.	Year, 1889.	Months, 1889.												Nativity of mothers of illegitimates, 1889.						Nativity of fathers of illegitimates, 1889.							
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.	Native.			Foreign.			Totals.	Native.			Foreign.		
															Totals.	Born in Michigan.	Born in other states.	Totals.	Born in Canada.	Born in other coun-tries.		Unknown.	Totals.	Born in Michigan.	Born in other states.	Totals.	Born in Canada.	Born in other coun-tries.	Unknown.
Totals.	421	33	35	35	44	38	36	44	31	30	33	29	33	127	107	20	74	24	50	220	45	37	8	36	12	24	340
Males	200	16	16	14	20	13	21	23	14	12	19	14	13	56	44	13	40	13	27	104	18	15	3	18	6	12	165
Females	219	17	19	21	24	20	15	21	16	17	14	15	20	71	63	8	34	11	23	114	27	22	5	18	6	12	175
Unknown.	2								1	1									3								

TABLE 24.—*Exhibiting the number and ratio of illegitimate births returned in fourteen years, 1876-1886.*

Years.	Children born out of wedlock.		Years.	Children born out of wedlock.	
	Number.	To every 1,000 births.		Number.	To every 1,000 births.
1876.....	266	7.77	1883.....	311	7.62
1877.....	316	9.46	1884.....	198	4.78
1878.....	202	5.74	1885.....	248	5.89
1879.....	292	8.56	1886.....	300	7.30
1880.....	425	12.03	1887.....	422	9.13
1881.....	332	10.99	1888.....	591	12.07
1882.....	301	8.13	1889.....	421	8.54
Average 14 years				334	8.43

Table 25 gives the nativity of mothers of illegitimate children as returned for the last fourteen years. Unless certain facts are taken into consideration it would appear that the native born mothers were more immoral than the foreign born mothers. It must be remembered that nearly all Indians and those of African descent are classed as native born. Also the difference in population, there being in Michigan 291,906 native born females between the ages of 15 and 45 to 125,373 foreign born females of the same age.

TABLE 25.—*Showing the nativity of mothers of illegitimates returned for the fourteen years, 1876-1889.*

Years.	Totals.	Native.		Foreign.		Unknown.	
		Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
1876.....	266	173	65.04	53	19.92	40	15.04
1877.....	316	161	50.95	80	25.32	75	23.73
1878.....	202	114	56.44	34	16.83	54	26.73
1879.....	292	137	46.92	90	30.82	65	22.26
1880.....	425	143	34.82	73	17.18	204	48.00
1881.....	382	187	48.95	98	25.65	97	25.40
1882.....	301	145	48.17	77	25.58	79	26.25
1883.....	311	137	44.05	86	27.65	88	28.30
1884.....	193	108	55.97	69	35.75	21	10.88
1885.....	248	115	46.37	86	34.68	47	18.95
1886.....	300	142	47.33	45	15.00	113	37.67
1887.....	422	151	35.78	72	17.06	199	47.16
1888.....	591	149	25.21	72	12.18	370	62.61
1889.....	419	126	30.08	73	17.42	220	52.51
Average.....	333	142	45.25	72	23.00	119	31.82

TABLE 26.—*Exhibiting, by sex and color, the population of 1884, the number of illegitimates returned for the year 1889, and the per cent of such children to inhabitants.*

Color or race.	Sex.	Population in 1884, represented by births in 1889.	Total illegitimate births, 1889.	Per cent of births to population.	Per cent of each sex to total of both sexes.	Number of inhabit- ants to one illegit- imate child of the same color.
All colors.....	Totals.....	21,843,941	421	.02		4,380
	Males.....	968,794	200	.02	47.50	4,844
	Females.....	874,941	219	.03	52.02	3,995
	Unknown.....	206	2	.97	.48	103
White.....	Totals.....	1,820,947	405	.02		4,496
	Males.....	956,854	190	.02	46.91	5,036
	Females.....	864,083	213	.02	52.59	4,057
	Unknown.....	10	2	.20	.50	5
Black.....	Totals.....	6,853	7	.10		979
	Males.....	3,690	4	.11	57.14	923
	Females.....	3,163	3	.09	42.86	1,054
Mulatto.....	Totals.....	8,257	5	.06		1,651
	Males.....	4,203	4	.10	80.00	1,051
	Females.....	4,054	1	.02	20.00	4,054
Indian.....	Totals.....	6,784	2	.03		3,392
	Males.....	3,509	1	.03	50.00	3,509
	Females.....	3,275	1	.03	50.00	3,275
Unknown.....	Totals.....	1,030	2	.19		515
	Males.....	468	1	.21	50.00	468
	Females.....	366	1	.27	50.00	366
	Unknown.....	196				
Black and Mulatto.....	Totals.....	15,110	12	.08		1,259
	Males.....	7,893	8	.10	66.67	957
	Females.....	7,217	4	.06	33.33	1,804

a Includes 70 Asiatic males.

TABLE 27.—*Exhibiting by counties, the number of pairs of twins, and the number of illegitimate and still born children returned for the year 1889.*

State and counties.	Number of pairs of twins born in 1889.	Number of illegitimate children born in 1889.	Number of still births in 1889.	Counties.	Number of pairs of twins born in 1889.	Number of illegitimate children born in 1889.	Number of still births in 1889.
State	527	421	1,202	Ingham.....	9	5	18
				Ionia	5	4	8
Alcona				Iosco	2	2	9
Alger		1		Iron	2		1
Allegan	7	1	14	Isabella	1	1	5
Alpena	10		12	Jackson.....	8	1	16
Antrim	2	2	3	Kalamazoo	5	1	19
Arenac	3		4	Kalkaska	2		1
Baraga	1	1	2	Kent	28	43	63
Barry	5	2	7	Keweenaw	1	1	4
Bay	21	6	48	Lake			
Benzie	1		4	Lapeer	7	1	12
Berrien	9	3	10	Leelanaw	4	1	5
Branch	3	5	19	Lenawee	12	6	11
Calhoun	6	2	15	Livingston	6	1	5
Cass	3	2	4	Luce		1	1
Charlevoix	1	2		Mackinac	1	1	3
Cheboygan	5	2	8	Macomb	7	5	17
Chippewa	2		1	Manistee	6	5	18
Clare	3		1	Manitou		1	
Clinton	4	2	8	Marquette	15	9	33
Crawford				Mason	5	1	7
Delta	8	1	12	Mecosta	5	8	5
Eaton	5	4	10	Menominee	9		39
Emmet	3	2	6	Midland		1	10
Genesee	6	3	14	Missaukee			3
Gladwin	2		1	Monroe	7	3	15
Gogebic	3	1	6	Montcalm	13	6	10
Grand Traverse	2	1	4	Montmorency			6
Gratiot	8	1	5	Muskegon	8		37
Hillsdale	4	2	10	Newaygo	1	1	6
Houghton	9	11	29	Oakland	4	2	23
Huron	9	2	23	Oceana		3	7

BIRTHS OF ILLEGITIMATE AND STILL BORN CHILDREN.

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TABLE 27.—CONTINUED.—*Births, 1889.*

Counties.	Number of pairs of twins born in 1889.	Number of illegitimate children born in 1889.	Number of still births in 1889.	Counties.	Number of pairs of twins born in 1889.	Number of illegitimate children born in 1889.	Number of still births in 1889.
Ogemaw.....	1	3		Schoolcraft.....	1		1
Ontonagon.....	1		3	Shiawassee.....	4		12
Osceola.....	6		7	St. Clair.....	18	14	32
Oscoda.....				St. Joseph.....	6	4	6
Otsego.....			3	Tuscola.....	6	3	22
Ottawa.....	4	6	26	Van Buren.....	4	6	13
Presque Isle.....	1		3	Washtenaw.....	4	5	15
Rosecommon.....				Wayne.....	131	190	301
Saginaw.....	15	12	53	Wexford.....			3
Sanilac.....	7	5	11				

Table 28 gives the names of the townships in Michigan in which it was reported there were no births in 1889. Four of these townships were organized since the census of 1884 and the remaining ones represent a population of 2,901.

TABLE 28.—*Townships in which it was reported there were no births in 1889.*

Counties.	Townships, no births in 1889.	Population in 1884.		
		Totals.	Males.	Females.
Totals.....		2,901	2,043	858
Arenac.....	Turner ^a			
Benzie.....	Colfax.....	179	91	88
Cheboygan.....	{ Burt.....	353	192	161
	{ Waverly.....	49	33	16
Crawford.....	Blaine ^a			
Houghton.....	Laird ^a			
Ogemaw.....	{ Hill.....	30	20	10
	{ Mills.....	62	33	29
Ontonagon.....	{ Carp Lake.....	1,117	1,069	48
	{ Interior ^a			
Oscoda.....	Big Creek.....	143	82	61
Otsego.....	{ Bagley.....	643	338	305
	{ Dover.....	180	91	69
Wexford.....	Boon.....	165	94	71

^a Organized since census was taken.

Table 29 shows the townships, and the counties in which they are located, from which no returns of births were received for the year 1889. As usual the supervisors failed to make the proper returns to the county clerk.

VITAL STATISTICS OF MICHIGAN, 1889.

TABLE 29.—Exhibiting the counties and townships from which no returns of births were received in 1889.

Counties.	Townships, for which no returns of births were received for 1889.	Population, June 1, 1884.			White.			Black and Mulatto.			Indian.			Unknown.			Native.			Foreign.			Unknown.		
		Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.
Totals		9,717	5,630	4,087	9,533	5,322	4,011	13	10	3	116	65	51	55	33	22	6,187	3,396	2,831	3,555	2,307	1,248	25	17	8
Chippewa	{ Detour	615	384	231	505	353	212	8	8		1		1	41	23	18	199	123	76	414	260	154	2	1	1
	{ Superior	680	408	272	557	339	218				115	65	50	8	4	4	320	179	141	358	227	131	2	2	
	{ Trout Lake																								
	{ White Fish																								
Crawford	{ Frederic	355	240	115	353	239	114	2	1	1							201	118	83	154	122	32			
	{ Grove	177	107	70	177	107	70										135	75	60	42	32	10			
	{ Maple Ridge	175	100	75	175	100	75										97	47	50	78	53	25			
Delta	{ Minnewauka																								
	{ Billings	83	50	33	83	50	33										59	33	26	24	17	7			
Gladwin	{ Back Eye	102	63	39	102	63	39										77	44	33	25	19	6			
	{ Sage	112	69	43	112	69	43										76	41	35	36	28	8			
	{ East Bay	1,013	555	458	1,012	554	458	1	1								815	447	368	191	105	86	7	3	4
Gd. Traverse	{ Peninsular	970	528	442	969	528	441	1	1	1							765	414	351	201	111	90	4	3	1
	{ Traverse	3,410	1,744	1,666	3,407	1,742	1,665	1	1	1				2	2		2,393	1,124	1,179	1,104	618	486	3	2	1
Iosco	{ Tompson	42	26	16	42	26	16										24	12	12	18	14	4			
	{ Felch																								
Iron	{ Mastodon																								
	{ Center	79	46	33	79	46	33										71	40	31	8	6	2			
Lake	{ Glencoe	72	40	32	72	40	32										64	34	30	8	6	2			

BIRTHS, TOWNSHIPS MAKING NO RETURNS.

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Marquette.....	370	205	165	370	208	165	176	86	90	194	119	75	---	---	---
Mason.....	476	296	180	472	292	180	262	152	110	208	138	70	6	6	---
	183	119	64	183	119	64	107	70	87	76	49	27	---	---	---
	251	183	58	251	198	58	138	94	44	113	99	14	---	---	---
	391	353	28	391	353	38	138	107	31	253	246	7	---	---	---
	161	104	57	161	104	57	110	66	44	50	38	12	1	1	1
Roscommon.....	161	104	57	161	104	57	110	66	44	50	38	12	1	1	1

* Organized since census was taken.

MARRIAGES, 1889.

There were 18,300 marriages returned for the year 1889. With every year there are fewer corrections to be made in the statistics of this class. In 1888 the number of marriages first returned and compiled was 17,233. By referring to the corrected table it will be seen that the number has been increased to 17,294, or that 61 marriages were sent in after the compilation was made. In previous years the additions have often been six and seven hundred, but under the new law the returns are becoming better every year. For 1889 there was one marriage consummated to every 101 persons, according to the census of 1884.

The average number of marriages for certain divisions of the year were as follows:

Year, 1889.....	18,300
Quarter.....	4,575
Month.....	1,525
Week.....	352
Day.....	50

By Table 30 the marriages for 1886 and 1889 inclusive are given by the quarter of the year. The last or fourth quarter in every case having the highest number.

TABLE 30.—*Marriages by quarters of the year for each of the years 1886-1889, and the average for ten years, 1878-1887. Corrected for additional returns up to April 19, 1890.*

Totals and months with which quarters end.	1886.		1887.		1888.		1889.		Average for 10 years, 1878-1888.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Totals	16,665	100.00	17,179	100.00	17,294	100.00	18,300	100.00	16,129	100.00
March.....	3,577	21.46	3,567	20.76	3,702	21.41	4,183	22.85	3,523	21.84
June.....	3,726	22.37	3,991	23.23	4,070	23.58	4,260	23.28	3,650	22.63
September.....	4,116	24.69	4,561	26.55	4,054	23.44	4,287	23.43	3,908	24.23
December.....	5,239	31.44	5,055	29.44	5,461	31.57	5,567	30.42	5,048	31.27
Unknown.....	7	.04	5	.03	7	.04	8	.02	5	.03
Average *.....	4,166	25.00	4,295	25.00	4,323	25.00	4,575	25.00	4,032	25.00

* Including marriages in unknown quarter of the year.

MARRIAGES BY QUARTERS OF THE YEAR.

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Table 31 shows the number and proportion of marriages for each of the years 1886-1888, as first returned, tabulated and published, without the corrections for additional returns. A comparison of tables 30 and 31 will show the number of delinquent marriages which has been added to the number as first returned for each of the above years.

TABLE 31.—*Marriages by quarters of the year for each of the years 1885-1888, and the average for ten years, 1879-1888, as originally returned and published in reports.*

Totals and months with which quarters end.	1886.		1887.		1888.		1889.		Average for 10 years, 1879-1888.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
Totals.....	16,681	100.00	17,050	100.00	17,233	100.00	18,900	100.00	15,575	100.00
March.....	3,572	21.48	3,563	20.90	3,701	21.48	4,183	22.85	3,467	22.26
June.....	3,718	22.36	3,979	23.34	4,067	23.60	4,260	23.28	3,580	22.99
September.....	4,111	24.72	4,549	26.68	4,049	23.49	4,287	23.43	3,802	24.41
December.....	5,223	31.40	4,954	29.05	5,409	31.39	5,567	30.42	4,721	30.31
Unknown.....	7	.04	5	.03	7	.04	3	.02	5	.03
Average *.....	4,158	25.00	4,263	25.00	4,308	25.00	4,575	25.00	3,894	25.00

* The number in unknown quarter of year included.

As noticed before, the last quarter of the year seems to be the favorite time for weddings. Table 32, which gives the marriages by months, with the months arranged according to the number of marriages, the highest number first, will amply show this to be true. In the ten years' average November shows the most marriages and February the least.

TABLE 32.—*Marriages by months, greatest first, for the years 1887-1889, and the average for ten years, 1879-1888, corrected for additional returns up to April 19, 1890.*

Order.	1887.			1888.			1889.			Average for 10 years, 1879-1888.		
	Months.	Num- ber.	Per ct. of total.	Months.	Num- ber.	Per ct. of total.	Months.	Num- ber.	Per ct. of total.	Months.	Num- ber.	Per ct. of total.
	Total ..	17,179	100.00	Total ..	17,294	100.00	Total ..	18,300	100.00	Total ..	16,129	100.00
1	Sept....	1,793	10.44	Nov....	1,834	10.61	Oct.	1,907	10.42	Nov....	1,714	10.63
2	Nov....	1,776	10.34	Oct.	1,824	10.55	Nov....	1,891	10.33	Oct.	1,669	10.35
3	Dec....	1,724	10.04	Dec....	1,808	10.43	Dec....	1,769	9.67	Dec....	1,660	10.29
4	Oct.	1,555	9.05	Sept. ...	1,582	9.15	Sept. ...	1,649	9.01	Sept....	1,438	9.20
5	Aug....	1,426	8.30	Apr....	1,511	8.73	May	1,459	7.97	April ..	1,273	7.89
6	May	1,348	7.85	May	1,315	7.60	Jan.	1,438	7.86	July	1,270	7.87
7	July	1,342	7.81	Jan.	1,280	7.40	Mar....	1,414	7.73	Jan.	1,223	7.58
8	Apr.	1,322	7.69	July	1,254	7.25	June....	1,404	7.67	May	1,219	7.56
9	June....	1,321	7.68	June	1,244	7.20	April ..	1,397	7.63	Mar....	1,204	7.46
10	Mar....	1,288	7.50	Mar....	1,218	7.04	July	1,382	6.56	June....	1,158	7.13
11	Jan.	1,192	6.94	Aug....	1,218	7.04	Feb....	1,331	7.27	Aug....	1,155	7.16
12	Feb....	1,067	6.33	Feb....	1,204	6.96	Aug....	1,256	6.86	Feb....	1,066	6.80
	Unk....	5	.03	Unk. ..	7	.04	Unk....	3	.02	Unk. ..	5	.03
	Av. a....	1,431	8.33	Av. a....	1,436	8.33	Av. a....	1,525	8.33	Av. a....	1,344	8.33

a Includes those for unknown months.

TABLE 33.—*Distinguishing by counties and by months, the number of marriages returned for the year 1889.*

State and counties.	Year, 1889.	Months, 1889.												
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
State	18,300	1,438	1,331	1,414	1,397	1,459	1,404	1,382	1,256	1,649	1,907	1,891	1,769	3
Alcona.....	27	-----	1	2	4	1	1	3	1	2	4	3	5	---
Alger.....	6	-----	1	-----	-----	-----	1	-----	-----	2	1	-----	1	---
Allegan.....	318	14	24	35	28	32	16	18	21	27	37	28	38	---
Alpena.....	149	7	9	14	17	11	12	18	11	10	15	21	4	---
Antrim.....	75	8	7	-----	5	2	7	11	10	5	6	6	8	---
Arenac.....	40	1	2	4	4	5	2	5	1	4	5	3	4	---
Baraga.....	27	2	3	-----	3	1	4	-----	3	3	3	4	1	---
Barry.....	225	21	17	27	19	15	16	11	7	13	27	24	28	---
Bay.....	493	41	38	30	31	48	44	40	41	49	37	48	46	---
Benzie.....	44	4	3	3	4	4	6	2	4	3	5	2	4	---
Berrien.....	387	38	32	26	32	32	31	20	20	27	46	47	36	---
Branch.....	269	21	24	28	20	17	19	12	12	26	35	25	30	---
Calhoun.....	392	24	24	24	29	33	30	37	32	35	49	30	45	---
Cass.....	201	11	15	29	14	4	11	14	14	24	18	22	25	---
Charlevoix.....	79	2	7	8	4	3	6	9	7	10	5	7	11	---
Cheboygan.....	95	9	5	7	2	9	8	10	7	8	11	12	7	---
Chippewa.....	106	4	6	7	3	13	11	10	10	14	13	9	6	---
Clare.....	85	8	3	13	6	6	4	13	3	3	11	6	9	---
Clinton.....	215	18	20	13	14	14	10	15	17	12	26	32	24	---
Crawford.....	28	1	1	2	2	3	3	3	-----	6	3	2	2	---
Delta.....	163	14	8	16	5	21	16	17	13	10	16	15	12	---
Eaton.....	293	19	19	22	21	21	21	19	17	28	37	38	31	---
Emmet.....	88	6	3	7	4	5	8	8	10	9	10	7	11	---
Genesee.....	389	23	23	29	29	23	26	22	26	47	54	40	47	---
Gladwin.....	39	1	4	4	5	5	5	2	5	2	1	3	2	---
Gogebic.....	107	10	6	6	4	8	15	11	6	14	5	16	6	---
Grand Traverse..	140	16	12	14	12	16	20	1	8	12	10	15	4	---
Gratiot.....	241	19	20	21	26	17	12	22	19	16	26	19	24	---
Hillsdale.....	286	31	19	30	21	15	14	17	24	24	24	37	30	---

TABLE 33.—CONTINUED.—*Marriages by counties, by months.*

State and counties.	Year, 1889.	Months, 1889.												
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Houghton	357	26	20	11	29	27	34	47	28	34	44	38	19	.....
Huron.....	237	21	23	15	19	22	18	21	10	19	25	25	19	.....
Ingham	347	36	17	37	23	25	24	16	25	35	39	41	29	.....
Ionia.....	294	34	18	25	19	15	25	11	21	31	20	41	34	.....
Iosco.....	135	13	4	16	8	7	18	10	17	6	10	13	13	.....
Iron.....	40	3	2	1	3	3	8	3	3	2	4	6	2	.....
Isabella	158	11	6	15	16	11	10	13	14	17	20	11	14	.....
Jackson	330	28	44	31	23	16	23	38	23	33	41	36	44	.....
Kalamazoo	402	39	25	33	35	26	29	34	32	34	48	33	34	.....
Kalkaska.....	53	4	6	3	1	3	2	4	5	2	8	7	8	.....
Kent.....	1,141	75	85	88	90	119	105	72	75	100	116	104	112	.....
Keweenaw	15	2	1	.....	4	1	3	.....	2	.....	.....	2	.....	.....
Lake.....	55	3	3	6	6	3	2	6	3	4	4	9	6	.....
Lapeer.....	270	15	15	32	26	15	12	24	18	23	39	24	27	.....
Leelanaw	64	14	4	6	9	4	.....	3	8	1	3	8	4	.....
Lenawee	400	35	28	35	47	23	27	22	12	37	37	47	50	.....
Livingston.....	182	10	13	14	16	12	12	14	8	17	29	19	18	.....
Luce.....	42	3	4	5	2	5	4	2	3	2	4	6	2	.....
Mackinac.....	56	4	3	5	3	2	8	6	7	2	5	10	1	.....
Macomb.....	242	21	12	22	10	18	12	23	18	20	21	35	30	.....
Manistee	212	10	13	14	22	19	14	12	29	23	22	19	15	.....
Manitou.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Marquette.....	375	30	19	16	23	25	47	40	31	37	33	39	35	.....
Mason.....	163	14	9	14	13	8	6	23	13	16	16	12	19	.....
Mecosta.....	223	20	13	14	29	12	20	22	16	21	16	18	22	.....
Menominee	252	22	18	16	18	20	23	21	19	25	23	32	15	.....
Midland.....	99	8	4	6	16	8	7	3	8	12	9	8	10	.....
Missaukee.....	47	2	4	4	4	6	4	1	2	8	5	3	4	.....
Monroe.....	307	33	21	20	23	42	29	17	11	29	34	30	18	.....
Montcalm	312	18	20	49	34	21	19	26	14	32	35	13	31	.....
Montmorency.....	14	2	1	2	1	1	1	1	2	.....	.....	.....	3	.....
Muskegon	362	31	25	28	27	27	29	21	35	24	38	38	38	1
Newaygo.....	162	12	8	16	14	10	14	14	10	16	12	15	21	.....
Oakland.....	319	27	32	35	37	18	14	13	18	27	23	35	40	.....
Oceana.....	118	11	11	7	9	15	4	7	8	11	11	12	12
Ogemaw.....	49	3	1	1	4	6	8	1	11	3	4	7

MARRIAGES, BY COUNTIES, BY MONTHS.

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TABLE 33.—CONTINUED.—*Marriages by counties, by months.*

State and counties.	Year. 1889.	Months, 1889.												
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
Ontonagon	17	2	1	-----	2	2	1	1	1	-----	2	2	3	-----
Osceola	141	10	10	13	9	8	11	17	10	18	11	12	12	-----
Oscoda	19	3	-----	-----	1	-----	2	2	2	-----	1	2	6	-----
Otsego	39	2	5	-----	6	1	5	6	2	2	1	5	4	-----
Ottawa	277	23	15	14	37	31	21	14	19	19	24	21	39	-----
Presque Isle	26	4	1	-----	4	5	-----	1	-----	-----	4	4	3	-----
Roscomman	18	3	2	2	-----	-----	1	1	1	3	-----	3	2	-----
Saginaw	701	23	33	45	23	39	50	90	39	67	66	59	67	-----
Sanilac	236	14	12	18	18	16	17	16	20	18	29	30	26	2
Schoolcraft	44	6	2	2	2	4	5	4	5	5	4	1	4	-----
Shiawassee	239	23	27	17	19	16	17	25	18	17	32	33	44	-----
St. Clair	465	42	29	28	31	48	39	26	24	44	60	51	43	-----
St. Joseph	236	23	21	26	22	11	12	16	13	16	24	20	32	-----
Tuscola	292	30	25	19	18	17	11	18	18	34	43	22	37	-----
Van Buren	234	21	19	34	20	19	18	16	21	18	29	33	36	-----
Washtenaw	286	25	20	19	19	31	25	27	23	21	26	31	19	-----
Wayne	1,922	164	162	103	129	176	172	124	125	204	206	231	126	-----
Wexford	116	7	8	11	10	8	5	9	17	7	8	17	9	-----

TABLE 34.—*Exhibiting, by color and sex, the number of marriages and the per cent of persons married in 1889 to population in 1884.*

Color, 1889.	Sex.	Population June 1, 1884, represented by marriages in 1889.	Number of marriages, 1889.	Persons married, 1889.		Per cent of persons married in 1889 to pop- ulation June 1, 1884, by sex and color.	Number of persons who mar- ried those of another color.
				Number.	Per cent of totals.		
All colors	Totals	1,853,658	13,300	36,600	100.00	1.98	74
	Males	974,424		18,300	50.00	1.88	37
	Females	879,028		18,300	50.00	2.08	37
	Unknown	206					
White	Totals	1,830,480	13,111	36,225	96.97	1.98	15
	Males	962,376		18,111	49.48	1.87	6
	Females	868,094		18,114	49.49	2.09	9
	Unknown	10					
Black	Totals	6,856	92	172	.47	2.51	16
	Males	3,692		92	.25	2.49	14
	Females	3,164		80	.22	2.53	2
Mulatto	Totals	8,287	47	101	.28	1.22	23
	Males	4,211		47	.13	1.12	8
	Females	4,066		54	.15	1.33	15
Indian	Totals	6,900	48	98	.27	1.42	20
	Males	3,574		48	.13	1.34	9
	Females	3,326		50	.14	1.50	11
One or both unknown.	Totals	1,085	2	4		.37	
	Males	501		2		.40	
	Females	888		2		.52	
	Unknown	196					
Black and mulatto	Totals	15,128	139	273	.74	1.30	39
	Males	7,903		139	.38	.92	22
	Females	7,220		134	.36	.88	17

TABLE 35.—*Exhibiting for the State and counties, the number of marriages returned for the year 1889, and the color of persons married in 1888, stated by couples.*

State and counties.	Marriages, 1889.	Color of persons married, 1889, stated by couples.						
		White.	Black.	Mulatto.	Indian.	Female unk., male white.	Male unk., female white.	Both unk.
State.....	18,300	* 18,111	† 92	‡ 47	§ 48			2
Alcona.....	27	27						
Alger.....	6	5			a 1			
Allegan.....	318	316	1		1			
Alpena.....	149	149						
Antrim.....	75	73			2			
Arenac.....	40	39			1			
Baraga.....	27	b 24			c d 3			
Barry.....	225	225						
Bay.....	493	490		2	1			
Benzie.....	44	43		e 1				
Berrien.....	387	375	4	f 8				
Branch.....	269	269						
Calhoun.....	392	385	g 3	3	1			
Cass.....	201	189	12					
Charlevoix.....	79	h 76			3			
Cheboygan.....	95	95						
Chippewa.....	106	103		i 1 j 2				
Clare.....	85	85						
Clinton.....	215	214		k 1				
Crawford.....	28	28						
Delta.....	163	156	1	1	5			
Eaton.....	293	293						
Emmet.....	88	m 81			1 7			
Genesee.....	339	336	2		n 1			

* 4 couples, male white, female Indian.
† 12 couples, male black, female mulatto.
‡ 5 couples, male mulatto, female white.
§ 4 couples, male Indian, female half-breed.
a 1 couple, male white, female Indian.
b 1 couple, male Indian, female half-breed.
c 1 couple, male Indian, female half-breed.
d 1 couple, male half-breed, female Indian.
e 1 couple, male mulatto, female Indian.

f 1 couple, male mulatto, female creole.
g 1 couple, male black, female mulatto.
h 1 couple, male white, female mulatto.
i 1 couple, male mulatto, female white.
j 1 couple, male mulatto, female half-breed.
k 1 couple, male mulatto, female white.
l 1 couple, male Indian, female half-breed.
m 1 couple, male white, female Indian.
n 1 couple, male half-breed, female Indian.

TABLE 35.—CONTINUED—*Marriages in 1889, by counties, by color.*

Counties.	Marriages, 1889.	Color of persons married, 1889, stated by couples.						
		White.	Black.	Mulatto.	Indian.	Female unk., male white.	Male unk., female white.	Both unk.
Gladwin	39	37						s
Gogebic	107	107						
Grand Traverse	140	140						
Gratiot	241	240		1				
Hillsdale	286	286						
Houghton	357	357						
Huron	237	237						
Ingham	347	342	5					
Ionia	294	293	1					
Iosco	135	134		1				
Iron	40	40						
Isabella	158	153		1	op 4			
Jackson	380	374	4	2				
Kalamazoo	402	396	3	3				
Kalkaska	53	53						
Kent	1,141	1,132	q 5	4				
Keweenaw	15	15						
Lake	55	55						
Lapeer	270	270						
Leelanaw	64	60			4			
Lenawee	400	396	r 3	1				
Livingston	182	181	1					
Luce	42	42						
Mackinac	56	s t 54			2			
Macomb	242	242						
Manistee	212	212						
Manitou	1	1						
Marquette	375	375						
Mason	163	160			3			
Mecosta	223	220	2		1			
Menominee	252	252						
Midland	99	99						
Missaukee	47	46			1			
Monroe	307	304	u v 3					

o 1 couple, male half-breed, female white.
 p 1 couple, male Indian, female white.
 q 3 couples, male black, female mulatto.
 r 1 couple, male black, female mulatto.

s 2 couples, male white, female Indian.
 t 1 couple, male Indian, female white.
 u 1 couple, male black, female mulatto.
 v 1 couple, male black, female white.

MARRIAGES, BY COUNTIES, BY COLOR.

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TABLE 35.—CONTINUED—*Marriages in 1889, by counties, by color.*

Counties.	Marriages, 1889.	Color of persons married, 1889, stated by couples.						
		White.	Black.	Mulatto.	Indian.	Female unk., male white.	Male unk., female white.	Both unk.
Montcalm	312	312						
Montmorency	14	14						
Muskegon	362	362						
Newaygo	162	161			1			
Oakland	319	318		w 1				
Oceana	118	116			2			
Ogemaw	49	49						
Ontonagon	17	17						
Osceola	141	141						
Oscoda	19	19						
Otsego	39	39						
Ottawa	277	277						
Presque Isle	26	26						
Roscommon	18	18						
Saginaw	701	696	4		1			
Sanilac	236	236						
Schoolcraft	44	44						
Shiawassee	289	289						
St. Clair	465	465						
St. Joseph	236	234	2					
Tuscola	292	291	1					
Van Buren	284	278	1	5				
Washtenaw	286	279	7					
Wayne	1,922	z 1,888	y**27	x 11	1			
Wexford	116	116						

w 1 couple, male mulatto, female black.
 z 2 couples, male mulatto female white.
 y 1 couple, male black, female yellow.

x 1 couple, male white, female black.
 ** 4 couples, male black, female mulatto.

Table 36 shows the marriages in 1889 arranged according to nativity. We find that there were 11,983 native grooms to 13,948 native brides, and 6,303 foreign born grooms to 3,903 foreign born brides. Of the 18,300 couples married, the contracting parties were both native in 10,208 cases, and both were foreign in 2,473 cases. The percentages of the nativities can be seen by the table.

TABLE 36.—*By nativity, the number and per cent of brides and bridegrooms returned for the year 1889.*

Bridegrooms and brides,—Nativity specified.		Brides, 1889.			Bridegrooms, 1889.	
		Native born.	Foreign born.	Unknown.	Total of each nativity and of all nativities.	Per cent of each nativity.
Bridegrooms	Native born.....	10,208	1,480	345	11,983	76.22
	Foreign born.....	3,735	2,473	95	6,303	21.33
	Unknown.....	5	-----	9	14	2.45
Brides.	Whole number of each nativity and total....	13,948	3,903	449	18,300	-----
	Per cent of each nativity and total.....	65.48	34.44	.08	-----	100.00

The marriage rates for the native and foreign born inhabitants to the whole population of the State may be learned from Table 37. The increase for 1889 in the number of marriages is more evenly divided between the native and foreign born inhabitants, than was the increase for 1888, when it nearly all came from the foreign born.

In order to learn the actual marriage rate, the number of marriages must be divided by the number of inhabitants at marriageable ages at the time of the occurrence of the marriages. The nearest approach to the actual marriage rate for 1889 is that based upon marriages in 1889 and the inhabitants in 1884 as is done in the tabular exhibit which follows Table 37. By this exhibit it appears that the marriage rate among the native born inhabitants in 1889, was slightly greater than among the foreign born, and that it is greatest among the native born females and least among the foreign born females.

TABLE 37.—*Exhibiting by sex, the nativity of persons married in Michigan in 1889, and the population in 1884.*

Nativity of persons married, 1889.	Marriages, 1889.		Population, June 1, 1884, represented by marriages, 1889.			Persons married, 1889.					
	Number.	Per cent of total.	Totals.	Males.	Females.	Number.			Per cent of persons married in 1889 to population of same nativity, June, 1, 1884.		
						Totals.	Males.	Females.	Totals.	Males.	Females.
Totals.....	15,300	100.00	1,853,658	974,424	879,028	36,600	18,300	18,300	1.97	1.88	2.08
Native born.....	10,208	55.78	1,357,689	695,490	662,145	25,931	11,983	13,948	1.91	1.72	2.11
Foreign born.....	3,735	20.41	486,068	272,298	214,662	10,206	6,303	3,903	2.10	2.31	1.82
Foreign male and native female.....	2,473	13.51									
Foreign female and native male.....	1,430	7.82									
Nativity unknown....	454	2.48	9,051	6,636	2,214	463	14	449	5.12	.21	20.28
One or both native....	14,111	77.11									
One or both foreign....	7,638	47.74									

Nativity.	Inhabitants June 1, 1884, aged 15 years and over.			Persons married, 1889.			Per cent of persons married in 1889 to inhabitants June 1, 1884, aged 15 years and over.		
	Both sexes.	Males.	Females.	Both sexes.	Males.	Females.	Both sexes.	Males.	Females.
All nativities.....	1,213,634	649,588	564,046	36,600	18,300	18,300	3.02	2.82	3.26
Native.....	782,620	408,790	378,830	25,931	11,983	13,948	3.31	2.97	3.68
Foreign.....	423,384	239,827	183,557	10,206	6,303	3,903	2.41	2.62	2.13

Table 38 gives the percentages with relation to nativity of persons married in this State for the last fourteen years. The per cent of the native born is higher for 1889 than it was for 1888, but is still considerable below the average for ten years. It will be noticed that the per cents in this class have, on the whole, been growing lower every year since 1879, while the per cent of the foreign born have been increasing. In the class of native born groom and foreign born bride, the present year shows a decided increase, and the foreign born groom and native born bride as much of a decrease.

TABLE 38.—*Per cent of marriages, by nativity, in Michigan for fourteen years, 1876-1889, and the average for these years.*

Years.	Both native born.	Both foreign born.	Native born groom and foreign born bride.	Foreign born groom and native born bride.	Unknown.
1876.....	62.44	15.02	7.01	13.26	2.27
1877.....	63.88	14.31	7.18	13.05	2.18
1878.....	63.88	12.68	7.72	13.48	2.29
1879.....	64.15	12.78	7.40	13.56	2.11
1880.....	62.17	15.20	7.48	13.02	2.13
1881.....	59.80	18.00	8.18	12.75	1.77
1882.....	58.15	19.61	8.72	12.47	1.05
1883.....	57.19	20.60	8.65	12.27	1.29
1884.....	57.28	20.32	9.00	12.11	1.29
1885.....	59.14	18.65	8.90	12.13	1.18
1886.....	58.50	18.71	8.76	12.79	1.24
1887.....	56.65	20.22	8.47	13.10	1.56
1888.....	54.97	21.46	7.88	13.49	2.25
1889.....	55.78	20.41	13.51	7.82	2.48
Average.....	69.40	20.66	9.90	14.61	2.06

AGES OF PERSONS MARRIED.

Table 39 gives the average age, at time of marriage, of both males and females for all nativities, for the native and foreign born and also for those of unknown nativities.

TABLE 39.—*By nativity, the average age of persons married in Michigan in 1886-1889, and the average for the ten years 1879-1888.*

Nativity of persons married.	1886.		1887.		1888.		1889.		Average age for 10 years, 1879-1888.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
All nativities.....	28.26	23.35	28.60	23.57	29.20	24.43	28.24	23.45	28.34	23.48
Native.....	27.78	22.85	28.17	23.17	28.07	23.00	27.86	22.89	27.79	22.91
Foreign.....	29.28	24.63	29.40	24.54	29.29	24.81	29.00	24.52	29.31	24.48
Unknown.....	28.44	24.26	29.85	23.69	30.25	25.49	26.29	25.75	29.59	24.14

The marriages in 1889 by sex and periods of age, and the number and proportion of persons married are shown in table 40. The proportion of males married under 20 years of age shows a slight increase for the present year, being 1.87, while for 1888 it was 1.80. The females in 1889 gave a per cent of 32.79 for 31.82 in 1888.

The total number of persons married under 21 may also be seen in this table, while it is more than for 1888, it is about the average for the total number of marriages. According to the marriage laws of Michigan, only males who have attained the full age of 18 years and females the full age of 16 years, are capable of contracting marriage. It is

certainly gratifying to note the fact that in 1889 no males were married under the legal age and but 19 females, 18 at fifteen, and 1 at twelve.

The penalty for solemnizing an illegal marriage is a fine not exceeding five hundred dollars. Convictions under this law are seldom, if ever, heard of, though every year there are several marriages returned where one or both of the parties were not of legal age, perhaps it is because no one interested in the persons contracting the marriage cared to interfere.

TABLE 40.—*Exhibiting, by sex, and by periods of age, the number and per cent of persons married during the year 1889.*

Ages in years and periods.	Marriages, 1889.						
	Total number of persons married 1889.	Males.			Females.		
		Number married.	Per cent of total married.	Per cent of persons married at corresponding ages.	Number married.	Per cent of total married.	Per cent of persons married at corresponding ages.
All ages.....	36,600	18,300	100.00	50.00	18,300	100.00	50.00
12.....	1				1		
13.....							
14.....							
15.....	18				18	.10	100.00
16.....	885				885	4.57	100.00
17.....	1,145				1,145	6.25	100.00
18.....	2,108	97	.58	4.61	2,006	10.96	95.39
19.....	2,243	246	1.34	10.97	1,997	10.92	89.08
20.....	2,498	608	3.32	24.39	1,885	10.30	75.61
21 to 25.....	11,821	6,347	34.68	53.69	5,474	29.91	43.81
25 to 30.....	8,565	6,000	32.80	70.01	2,565	14.02	29.99
30 to 35.....	3,174	2,241	12.25	70.60	933	5.10	29.40
35 to 40.....	1,501	1,012	5.53	67.42	489	2.67	32.58
40 to 45.....	922	587	3.21	63.67	335	1.83	36.83
45 to 50.....	615	384	2.09	62.44	231	1.26	37.56
50 to 55.....	392	243	1.33	61.99	149	.82	38.01
55 to 60.....	286	188	1.00	63.99	108	.56	36.01
60 to 65.....	225	152	.83	67.56	73	.40	32.44
65 to 70.....	146	117	.64	80.14	29	.16	19.86
70 to 75.....	63	52	.28	82.54	11	.06	17.46
75 to 80.....	27	25	.13	92.59	2	.01	7.41
80 and over.....	3	3	.02	100.00			
Unknown ages.....	22	3	.02	13.64	19	.10	86.36
Under 15.....	1				1		
15 to 20.....	6,344	343	1.87	5.41	6,001	32.79	94.59
20 to 25.....	14,814	6,955	38.01	48.59	7,859	40.21	57.41

MARRIAGES, BY COUNTIES, NATIVITY, SEX AND AGE.

Barry	225	183	3	20	7	9	2	1				Males	4	86	73	20	11	7	6	2	5	6	3	2	
												Females	69	75	36	19	7	3	3	5	6		1	1	
Bay	493	*168	153	112	59		1					Males	8	179	171	63	26	13	16	5	8	3	1		
												Females	171	197	62	21	18	13	4	5	1				
Benzie	44	21	11	9	3							Males		19	15	7	2		1						
												Females	21	14	4	3	1		1						
Berrien	387	305	16	26	23	15			2			Males	6	155	129	34	23	10	10	7	7	1	5		
												Females	115	176	47	17	9	7	9	3	2	1	1		
Branch	269	246	1	10	4	7			1			Males	13	105	73	26	8	14	6	6	4	4	8	2	
												Females	92	92	37	14	13	3	5	7	2	1	1	1	
Calhoun	392	290	25	31	22	22	1	1				Males	8	146	126	52	22	9	9	6	5	4	3	2	
												Females	105	167	62	21	17	8	2	5		4	1		
Cass	201	180	3	8	3	6	1					Males	9	88	57	17	5	6	3	4	2	7	1	2	
												Females	72	89	13	6	3	5	5	2	2	3	1		
Charlevoix	79	40	14	15	9	1						Males		32	30	8	5	1		2		1			
												Females	32	31	7	6	1	1		1					
Cheboygan	95	30	23	20	10	5	2					Males	2	25	39	15	4	2	5	2	1				
												Females	33	37	10	7	2	2	2	1		1			
Chippewa	106	8	66	15	15		2					Males		34	39	19	5	4	2	2		1			
												Females	34	46	17	5	2	1				1			
Clare	85	33	14	22	12	3	1					Males	1	36	23	14	5	4	1			1			
												Females	44	21	9	3	3	4		1					
Clinton	215	167	1	12	15	16	3	1				Males	5	77	76	23	7	7	6	2	2		3	1	1
												Females	72	95	27	8	3	5	1	2	2				
Crawford	28	7	9	11		1						Males		7	10	6	3	2							
												Females	13	8	4	2		1							
Delta	163	39	77	32	15							Males	2	54	56	31	12	1	3	1	8				
												Females	52	64	34	6	3	2	1						

MARRIAGES, BY COUNTIES, NATIVITY, SEX AND AGE.

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		51	92	63	28	2	2	78	98	25	19	4	2	5	8	1	...
Huron.....	237	51	92	63	28	2	2	78	98	25	19	4	2	5	8	1	...
								{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....
								Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....
Ingham.....	347	276	18	15	13	17	8	9	157	84	30	20	6	6	2	4	3
								{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....
								Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....
Ionia.....	294	243	10	21	13	4	3	9	117	80	35	17	7	9	5	1	2
								{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....
								Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....
Iosco.....	135	29	64	21	21			2	39	57	23	6	4	1	1	2	
								{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....
								Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....
Iron.....	40	4	26	8	2			14	13	6	4	3					
								{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....
								Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....
Isabella.....	158	102	18	21	13	3	1	3	62	57	12	11	3	4	2	1	1
								{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....
								Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....
Jackson.....	350	292	16	40	21	8	3	8	153	109	42	18	16	7	8	4	3
								{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....
								Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....
Kalamazoo.....	402	288	50	31	26	4	3	6	148	132	48	30	10	6	6	7	3
								{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....
								Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....
Kalkaska.....	53	36	5	4	4	4		31	9	5	3	2	1	1	1	1	1
								{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....
								Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....
Kent.....	1,141	538	285	166	94	5	3	26	18	1	3	2	1	1	1		
								{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....
								Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....
Keweenaw.....	15	4	10	1				30	424	363	137	64	45	33	13	11	7
								{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....
								Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....
Lake.....	55	27	6	7	6	8		1	8	6							
								{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....
								Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....
Lapeer.....	270	164	28	44	33		1	25	18	6	2	3	1				
								{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....
								Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....
Leelanaw.....	64	35	11	12	6			6	106	73	31	18	14	6	3	4	2
								{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....
								Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....
								92	100	39	9	7	5	5	2	2	4
								{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....
								Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....
								1	29	23	3	5	1	1	1		
								{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....	{ Males.....
								Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....	Females.....
								30	22	5	2	4	1				

MARRIAGES, BY COUNTIES, NATIVITY, SEX AND AGE.

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Meosta.....	223	127	38	34	19	4	1			Males.....	4	83	57	83	19	4	6	---	5	1	---	1
										Females.....	85	85	28	11	11	2	8	1	2	---		
Manominee.....	252	83	161	39	10	1	8			Males.....	1	76	114	34	9	18	1	2	2	---		
										Females.....	97	90	41	11	9	3	1	---	---	---		
Midland.....	99	40	15	16	12	14	2			Males.....	3	41	30	8	9	2	5	1	---	---		
										Females.....	50	28	12	3	4	1	---	---	---	---	1	
Missaukee.....	47	20	14	10	3					Males.....	---	18	14	6	2	3	2	---	1	---		
										Females.....	19	14	7	2	1	2	1	---	1	---		
Monroe.....	307	266	13	15	15	8				Males.....	9	120	105	35	15	6	6	1	---	6	4	---
										Females.....	98	113	56	13	11	6	4	2	3	1	---	---
Montcalm.....	812	205	35	30	27	12	3			Males.....	9	114	95	46	15	9	9	4	4	3	3	1
										Females.....	122	108	37	15	10	5	7	3	3	2	---	---
Montmorency.....	14	6	2	3	3					Males.....	1	6	5	1	---	1	---	---	---	---	---	---
										Females.....	7	4	3	---	---	---	---	---	---	---	---	---
Muskegon.....	362	134	131	58	32	5	2			Males.....	9	124	109	53	25	12	11	4	2	4	2	2
										Females.....	115	144	49	14	12	9	9	6	1	1	1	1
Newaygo.....	162	108	20	19	10	5				Males.....	7	64	48	16	10	5	2	5	---	4	---	1
										Females.....	81	51	11	6	3	3	4	2	1	---	---	---
Oakland.....	819	251	16	31	20	1				Males.....	7	130	98	43	15	7	9	6	2	3	---	2
										Females.....	98	139	43	16	7	6	2	2	4	1	1	---
Oceana.....	118	81	6	18	12	1				Males.....	4	48	32	14	5	2	3	2	2	3	3	---
										Females.....	44	38	17	3	7	1	1	2	3	2	---	---
Ogemaw.....	49	22	10	10	6	1				Males.....	---	21	14	6	4	1	---	1	---	1	1	---
										Females.....	25	13	6	2	---	1	1	---	---	---	---	---
Ontonagon.....	17	13	1	4						Males.....	---	5	9	2	1	---	---	---	---	---	---	---
										Females.....	3	8	5	1	---	---	---	---	---	---	---	---
Osceola.....	141	66	23	33	13	4	2			Males.....	3	65	42	8	10	6	1	4	---	2	---	---
										Females.....	56	53	17	4	3	5	3	---	---	---	---	---

MARRIAGES, BY COUNTIES, NATIVITY, SEX AND AGE.

[illegible]

Table 42 gives the manner of union by ages. The last column but one shows the number of males married at certain ages, and the last gives the per cent of each. The two rows of figures at the bottom of the table show the number of females at the corresponding ages, and the per cents for the same. It will be seen that 343 males under 20 were married during the year, and 6,002 females of the same age during the same time. As usual, the ages for which there were the most marriages was from 20 to 25 when there were, 3,445. For 1888, for the same ages, there were 3,120.

TABLE 42—*Exhibiting the number of each sex, at each period of age, married during the year 1889, and the per cent of brides and of bridegrooms at each period of age to total at all ages.*

Age of males, 1889.	Age of females, 1889.														Total Males.	Per cent of groom at each age.
	Under 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and over, Unknown.		
Under 20.....	273	60	9	1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	343	1.87
20 to 25.....	3,445	3,125	333	41	4	1	-----	-----	1	-----	-----	-----	-----	5	6,955	38.01
25 to 30.....	1,753	2,838	1,171	180	36	13	8	1	-----	-----	-----	-----	1	4	6,000	32.79
30 to 35.....	389	895	581	272	66	28	7	-----	1	-----	-----	-----	-----	2	2,241	12.24
35 to 40.....	88	256	253	181	141	44	16	2	-----	-----	-----	-----	-----	1	1,012	5.53
40 to 45.....	38	97	126	124	88	77	25	9	1	1	-----	-----	-----	1	587	3.21
45 to 50.....	7	40	51	74	70	68	51	19	1	2	-----	-----	-----	1	384	2.10
50 to 55.....	5	10	30	35	46	38	40	29	7	2	-----	-----	-----	1	243	1.33
55 to 60.....	4	5	2	10	26	35	46	33	16	6	-----	-----	-----	-----	183	1.00
60 to 65.....	-----	2	7	9	6	18	27	28	29	23	3	-----	-----	-----	152	.88
65 to 70.....	-----	1	2	3	3	13	10	16	26	22	15	6	-----	-----	117	.63
70 to 75.....	-----	-----	-----	2	2	-----	4	10	12	12	6	2	1	1	52	.28
75 to 80.....	-----	-----	-----	1	1	-----	2	2	8	3	5	3	-----	-----	25	.14
80 and over.....	-----	-----	-----	-----	-----	-----	-----	-----	1	2	-----	-----	-----	-----	3	.02
Unknown.....	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	3	3	.02
Total females..	6,002	7,359	2,565	933	489	335	281	149	103	73	29	11	2	19	18,800	-----
Per cent of brides at each age.....	32.80	40.21	14.02	5.10	2.68	1.83	1.26	.81	.56	.40	.16	.06	.01	.10	-----	100.00

TABLE 43.—*Exhibiting, by counties, the number of marriages in Michigan for the years 1887-1888, and 1889; the number as first returned, and the number returned since first compilation for the years 1887 and 1888; the number of inhabitants in 1884, and the per cent of marriages in 1889 to population in 1884.*

State and counties.	Marriages.							Population 1884, represented by marriages in 1889.	Number of inhabitants in 1884 to one marriage in 1889.	Per cent of marriages in 1889 to population in 1884.
	1887.			1888.			1889.			
	Number as first re- turned and com- piled.	Number returne d since first compli- lation.	Number returne d previous to June, 1889.	Number as first re- turned and com- piled.	Number returne d since first compli- lation.	Number returne d previous to June, 1889.	Number returned.			
State	17,050	129	17,179	17,233	61	17,294	18,300	1,853,658	101	.99
Alcona	26		26	25		25	27	4,028	149	.67
Alger	3	1	4	9		9	6	a		
Allegan	389	1	340	319		319	318	38,666	122	.82
Alpena	164		164	137		137	149	12,683	85	1.17
Antrim	68		68	78		78	75	8,761	117	.86
Arenac	32	2	34	32		32	40	4,027	101	.99
Baraga	15		15	28		28	27	3,039	113	.89
Barry	169		169	206		206	225	24,102	107	.98
Bay	334	4	338	447		447	493	51,221	104	.96
Benzie	31		31	25		25	44	4,389	100	1.00
Berrien	543	2	545	376		376	387	37,776	98	1.02
Branch	273		273	242		242	269	27,661	103	.97
Calhoun	349		349	323		323	392	41,585	106	.94
Cass	215		215	172	1	173	201	21,202	105	.95
Charlevoix	74		74	88		88	79	9,275	117	.85
Cheboygan	79		79	93	2	95	95	9,946	105	.96
Chippewa	96		96	106		106	106	8,422	79	1.26
Clare	58		58	68		68	85	5,549	65	1.53
Clinton	210		210	229		229	215	27,135	126	.79
Crawford	25		25	30		30	28	2,389	85	1.17
Delta	127	1	128	149		149	163	9,992	61	1.63
Eaton	269		269	266		266	293	31,802	109	.92
Emmet	53		53	72		72	88	7,944	90	1.11
Genesee	388		388	326		326	389	38,776	100	1.00
Gladwin	23		23	18		18	39	1,539	39	2.53

^a Organized since census was taken.

TABLE 43.—CONTINUED.—*Marriages, corrected by counties.*

Counties.	Marriages.						Population 1884, represented by marriages in 1889.	Number of inhabitants in 1884 to one marriage in 1889.	Per cent of marriages in 1889 to population in 1884.	
	1887.			1888.						1889.
	Number as first re- turned and com- pleted.	Number returne d since first compli- lation.	Number returne d previous to June, 1889.	Number as first re- turned and com- pleted.	Number returne d since first compli- lation.	Number returne d previous to June, 1889.				Number returned.
Gogebic	99	-----	99	121	-----	121	107	a	-----	-----
Grand Traverse.....	125	2	127	120	-----	120	140	12,092	86	1.16
Gratiot	214	-----	214	238	-----	238	241	25,049	104	.96
Hillsdale.....	349	-----	349	283	-----	283	286	31,686	111	.90
Houghton	257	-----	257	331	-----	331	357	26,146	78	1.37
Huron	156	1	157	169	-----	169	237	24,521	103	.97
Ingham	338	6	344	334	-----	334	347	34,939	101	.99
Ionia.....	282	2	284	272	3	275	294	32,559	111	.90
Iosco.....	139	2	141	123	4	127	135	10,602	79	1.27
Iron	13	-----	13	36	-----	36	40	a	-----	-----
Isabella	154	1	155	146	-----	146	158	16,011	101	.99
Jackson	302	-----	302	337	-----	337	380	45,232	119	.84
Kalamazoo	416	4	420	374	2	376	402	35,281	88	1.14
Kalkaska.....	44	-----	44	52	-----	52	53	4,493	85	1.18
Kent	919	-----	919	1,048	-----	1,048	1,141	84,600	74	1.35
Keweenaw	9	-----	9	14	-----	14	15	4,667	311	.32
Lake.....	40	1	41	69	1	70	55	7,539	137	.78
Lapeer	211	-----	211	247	-----	247	270	30,057	111	.90
Leelanaw	39	-----	39	58	-----	58	64	7,128	111	.90
Lenawee	463	2	465	349	-----	349	400	49,584	124	.91
Livingston	168	4	172	167	-----	167	182	21,568	119	.84
Luce.....	6	3	9	26	-----	26	42	a	-----	-----
Mackinac.....	51	-----	51	64	-----	64	56	5,171	92	1.08
Macomb	213	-----	213	251	1	252	242	31,293	129	.77
Manistee.....	196	1	197	222	5	227	212	19,875	94	1.07
Manitou	5	-----	5	-----	-----	-----	1	1,198	1,198	.08
Marquette	329	3	332	345	3	348	375	31,397	84	1.19
Mason	114	-----	114	127	-----	127	163	13,221	81	1.23
Mecosta.....	157	-----	157	190	-----	190	223	20,597	92	1.08
Menominee.....	244	19	263	243	-----	243	252	19,120	76	1.32
Midland	69	-----	69	76	-----	76	99	8,776	89	1.13
Missaukee	22	-----	22	38	-----	38	47	3,386	72	1.39
Monroe.....	318	4	322	300	9	309	307	33,353	109	.92

* Organized since census was taken.

MARRIAGES—COUNTY MARRIAGE RATES.

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TABLE 43.—CONTINUED.—*Marriages, corrected by counties.*

Counties.	Marriages.						Population 1884, represented by marriages in 1889.	Number of inhabitants in 1884 to one marriage in 1889.	Per cent of marriages in 1889 to population in 1884.	
	1887.			1888.						1889.
	Number as first returned and compiled.	Number returned since first completion.	Number returned previous to June, 1889.	Number as first returned and compiled.	Number returned since first completion.	Number returned previous to June, 1889.				Number returned.
Montcalm	249	5	254	264	.....	264	312	35,356	113	.88
Montgomery	6	.....	6	16	.....	16	14	845	60	1.66
Muskegon	364	1	365	427	.....	427	362	37,554	104	.96
Newaygo	140	.....	140	168	.....	168	162	18,996	117	.85
Oakland	325	3	328	320	.....	320	319	41,100	129	.78
Oceana	122	.....	122	135	5	140	118	14,519	123	.81
Ogemaw	38	.....	38	52	2	54	49	3,637	74	1.35
Ontonagon	24	.....	24	13	.....	13	17	4,836	284	.85
Osceola	142	.....	142	128	.....	128	141	14,001	99	1.01
Oscoda	25	2	27	18	.....	18	19	1,374	72	1.38
Otsego	23	.....	23	44	.....	44	39	3,906	100	1.00
Ottawa	298	1	299	229	.....	229	277	36,225	131	.76
Presque Isle	40	.....	40	32	.....	32	26	4,064	156	.64
Roscommon	12	.....	12	17	.....	17	18	2,588	144	.70
Saginaw	636	.....	636	635	.....	635	701	74,795	107	.94
Sanilac	201	.....	201	224	.....	224	236	29,583	125	.80
Schoolcraft	46	.....	46	53	.....	53	44	3,846	87	1.14
Shiawassee	231	2	233	276	1	277	289	28,078	97	1.03
St. Clair	466	.....	466	445	.....	445	465	46,783	101	.99
St. Joseph	271	.....	271	201	.....	201	236	26,277	111	.90
Tuscola	276	3	279	233	18	251	292	30,726	105	.95
Van Buren	274	.....	274	274	.....	274	284	30,341	107	.94
Washtenaw	332	25	357	312	.....	312	286	41,694	146	.69
Wayne	2,009	21	2,030	1,967	.....	1,967	1,922	188,966	98	1.02
Wexford	126	.....	126	116	4	120	116	10,518	91	1.10

VITAL STATISTICS OF MICHIGAN, 1889.

DIVORCES IN MICHIGAN.

In the following tabular exhibit, which was published in the report for 1887, may be seen the number of marriages in Michigan, the number of divorces and the ratio of divorces to marriages, for the years 1871-1886. These statistics of divorces in Michigan are taken from the Report of the Commissioner of Labor, Carroll D. Wright, made to Congress in February, 1889.

Years.	Number of marriages.	Number of divorces.	Ratio of divorces to marriages.
1871.....	10,181	680	1 to 16.2
1872.....	9,882	620	1 to 15.9
1873.....	10,572	705	1 to 15.0
1874.....	11,041	794	1 to 13.9
1875.....	11,055	864	1 to 12.8
1876.....	10,558	800	1 to 13.6
1877.....	11,009	927	1 to 11.9
1878.....	12,221	993	1 to 12.6
1879.....	13,225	1,110	1 to 11.9
1880.....	14,149	1,149	1 to 12.3
1881.....	14,847	1,318	1 to 11.3
1882.....	16,178	1,335	1 to 12.1
1883.....	16,420	1,368	1 to 11.9
1884.....	15,002	1,239	1 to 12.1
1885.....	15,016	1,227	1 to 12.2
1886.....	16,631	1,339	1 to 12.4
1887.....	17,050		
Average.....	13,255	1,027	1 to 12.9

The above statistics concerning the number of divorces in Michigan show the remarkable fact that one divorce is granted in this State to about twelve marriages solemnized. The increase has been rapid and constant, the number running from 449 in 1867 to 1,339 in 1886. As the tendency of later legislation in this State seems rather to restrict than to extend the facilities for securing divorce, this growth can hardly be accounted for in this way. The increase in divorces is very much greater than the increase in population, as may be seen from the following figures taken from the report above referred to.

The increase in the population of the United States between the census years 1870 to 1880 was 30.1 per cent, while the divorces for the same time increased 79.4 per cent. In our own State the increase in population between the above years was 38.2 per cent, while the percentage of increase in the number of divorces was 107.4 per cent. These facts offer opportunities for instructive study in the subject of social science.

DEATHS, 1889.

The total number of deaths recorded and returned for 1889 was 20,315, a less number than was returned for 1888, which was 21,764, but which was the greatest number ever registered in the history of the State. This does not show that the mortality is increasing, but rather that the registration is becoming more accurate. The statement following shows the number of deaths as returned and the number added for corrections, after the system used in the United States census reports, which is the same as was mentioned in the statistics concerning births.

	Inhabitants in 1884, represented by deaths in 1889.	Deaths as returned.	Deaths corrected for omissions in enumerating.	Per cent of deaths to inhabitants.	
				Deaths as returned.	Deaths as corrected for omissions.
Totals	1,846,845	20,315	27,461	1.09	1.49

By referring to the above table it will be seen that the corrected per cent of deaths to inhabitants is 1.49, or 14.9 for every 1,000. This is much lower than in other states having a system of registration. In Massachusetts the death rate for 1889 was 19.21 to every 1,000 of the estimated population. In New Hampshire the death rate is above 18 per thousand, and in Rhode Island it exceeds 16 in every thousand. These states with their large and crowded population would doubtless show a higher death rate than Michigan. The following statistics taken from the registration report of Massachusetts for 1889 shows the death rate in several foreign countries for 1888.

England and Wales	17.8 per 1,000.
Scotland	17.6 " "
Ireland	18.0 " "
Sweden	18.3 " "
Austria	29.2 " "
France	21.8 " "
Switzerland	19.9 " "
Norway	16.9 " "
Italy	26.8 " "
Russia	26.7 " "
German Empire	23.8 " "

The average number of deaths for certain divisions of the year, as returned and as corrected, can be seen in the following table:

Periods of time.	Deaths as returned.	Corrected for omissions.
Per quarter.....	5,079	6,865
Per month.....	1,698	2,288
Per week.....	391	528
Per day.....	55	75

Table 44 shows the number of deaths by quarters of the year, thus giving at a glance the seasons when the most deaths occur. The third and fourth quarters have the highest death rate for the years included in the table, and also for the ten years average. The last part of the table gives the returns as corrected.

TABLE 44.—Deaths in Michigan by quarters of the year, exhibiting the number and per cent of totals as returned and corrected for the years 1887-1889, and the average for ten years, 1879-1888.

Totals and months with which quarters end.		1887.		1888.		1889.		Average for 10 years, 1879-1888.	
		Number.	Per cent of total.	Number.	Per cent of total.	Number.	Per cent of total.	Number.	Per cent of total.
Totals.....		19,482	100.00	21,764	100.00	20,315	100.00	17,721	100.00
As returned.	March.....	4,058	20.83	4,866	22.36	4,351	21.41	3,668	20.67
	June.....	4,476	22.98	5,394	24.78	4,428	21.80	4,101	23.14
	September.....	5,886	30.21	5,936	27.28	5,916	29.13	5,112	28.85
	December.....	4,996	25.64	5,502	25.28	5,557	27.35	4,787	27.01
	Unknown.....	66	.34	66	.30	63	.31	58	.38
Average *.....		4,871	25.00	5,441	25.00	5,079	25.00	6,288	25.00
Totals.....		27,251	100.00	26,043	100.00	27,461	100.00	25,151	100.00
As corrected for omissions.	March.....	6,443	23.64	6,253	24.01	6,658	24.25	5,919	23.58
	June.....	6,597	24.21	6,687	25.49	6,220	22.65	6,154	24.47
	September.....	7,971	29.25	6,955	26.70	7,798	28.88	7,028	27.90
	December.....	6,174	22.66	6,132	23.55	6,727	24.49	5,992	23.82
	Unknown.....	66	.24	66	.25	63	.28	58	.23
Average *.....		6,313	25.00	6,511	25.00	6,415	25.00	6,288	25.00

* Including deaths in unknown month.

The following table, number 45, gives the mortality by months, the months having the greatest coming first, for 1887, 1888, 1889 and a ten years average, 1879-1888. August leads in every year presented in the table, and in the ten years average, while January shows the least number of deaths for every year but 1889.

TABLE 45.—*Exhibiting, by months, the number and per cent of deaths returned for the years 1887-1889, and the average for ten years 1879-1888, the months, in order of greatest first.*

Order.	1887.			1888.			1889.			Average for 10 years, 1879-1888.		
	Year and months.	Num- ber.	Per ct. of total.	Year and months.	Num- ber.	Per ct. of total.	Year and months.	Num- ber.	Per ct. of total.	Year and months.	Num- ber.	Per ct. of total.
	Year ...	19,482	100.00	Year ...	21,764	100.00	Year ...	20,815	100.00	Year ...	17,721	100.00
1	Aug....	2,055	10.55	Aug....	2,169	9.97	Aug....	2,214	10.90	Aug....	1,818	10.26
2	Sept....	1,916	9.83	Dec....	2,012	9.24	Sept....	2,025	9.97	Sept....	1,776	10.02
3	July....	1,915	9.83	Sept....	1,978	9.09	Dec....	1,951	9.80	Dec....	1,683	9.50
4	Dec....	1,748	8.95	Apr....	1,909	8.77	Oct....	1,894	9.32	Oct....	1,615	9.11
5	Oct....	1,699	8.72	Mar....	1,865	8.57	Nov....	1,712	8.42	July....	1,518	8.57
6	Apr....	1,599	8.21	May....	1,858	8.54	July....	1,677	8.26	Nov....	1,489	8.40
7	Nov....	1,554	7.98	Oct....	1,848	8.49	Mar....	1,676	8.25	April....	1,446	8.16
8	Mar....	1,535	7.87	July....	1,789	8.22	April....	1,585	7.80	May....	1,406	7.94
9	May....	1,472	7.56	Nov....	1,642	7.54	May....	1,454	7.16	Mar....	1,402	7.91
10	June....	1,405	7.21	June....	1,627	7.48	Jan....	1,409	6.94	June....	1,250	7.05
11	Feb....	1,274	6.54	Feb....	1,585	7.28	June....	1,389	6.84	Feb....	1,178	6.65
12	Jan....	1,249	6.41	Jan....	1,416	6.51	Feb....	1,266	6.23	Jan....	1,062	6.10
	Unk....	66	.34	Unk....	66	.30	Unk....	63	.31	Unk....	58	.33
	Av....	1,624	8.38	Av....	1,814	8.33	Av....	1,698	8.38	Av....	1,477	8.33

SEX OF DECEDENTS.

A period of fourteen years is included in Table 46. It gives the mortality of males and females and certain comparisons between the two. Every year the males exceed the females, the average for fourteen years being 115 males to 100 females. This does not necessarily indicate a greater proportionate mortality among the males, as they are in excess of the females in the total population.

TABLE 46.—*Number and per cent of deaths of males and females returned in Michigan for the years 1876-1889. (Unknown sex excluded.)*

Years.	Deaths of males as returned.	Deaths of females as returned.	Deaths of males to 100 deaths of females.	Per cent of each sex to total of both sexes.			
				Males.	Females.	Excess of the sexes.	
						Males.	Females.
1876.....	6,756	5,761	117.3	53.97	46.03	7.94	.....
1877.....	6,827	6,040	113.0	53.06	46.94	6.12	.....
1878.....	6,632	6,082	109.0	52.16	47.84	4.32	.....
1879.....	7,522	6,848	109.8	52.34	47.66	4.68	.....
1880.....	8,645	7,410	116.7	53.85	46.15	7.70	.....
1881.....	10,263	8,910	115.2	53.53	46.47	7.06	.....
1882.....	8,713	7,664	113.7	53.20	46.80	6.40	.....
1883.....	9,101	7,748	117.5	54.02	45.98	8.04	.....
1884.....	9,589	8,385	114.4	53.35	46.65	6.70	.....
1885.....	9,025	7,569	119.2	54.39	45.61	8.78	.....
1886.....	9,725	8,402	115.7	53.65	46.35	7.30	.....
1887.....	10,563	8,877	119.0	54.34	45.66	8.68	.....
1888.....	11,722	10,024	116.9	53.90	46.10	7.80	.....
1889.....	10,984	9,297	118.1	54.16	45.84	8.32	.....
Average.....	9,005	7,787	115.4	53.57	46.43	7.14	.....

OMISSIONS IN THE ENUMERATION OF DEATHS.

In table 47 the deaths by months for several years with a ten years average, and corrected by the method before mentioned, is given. The amount found necessary to be added on account of the length of time occurring between the deaths and their enumeration is about 42 per cent.

The order of the months in table 47 is changed from that of table 45 because it is thought that the omissions bear a direct relation to the time between the occurrence of the deaths and their enumeration, and that the per cent to be added to each month should be more or less as the time is longer or shorter.

TABLE 47.—*Exhibiting by months the number and per cent of deaths, as corrected for omissions in the enumeration, for the years 1887-1889, and the average for ten years, 1879-1888, months arranged in order by number, greatest first.*

Order.	1887.			1888.			1889.			Average for 10 years, 1879-1888.		
	Months.	Number.	Per cent of total.	Months.	Number.	Per cent of total.	Months.	Number.	Per cent of total.	Months.	Number.	Per cent of total.
	Total.	27,251	100.00	Total...	26,043	100.00	Total...	27,461	100.00	Total.	25,151	100.00
1	Aug...	2,783	10.21	Aug.....	2,543	9.77	Aug.....	2,921	10.64	Aug...	2,501	9.94
2	July...	2,669	9.79	April...	2,384	9.15	Sept....	2,600	9.47	Sept..	2,372	9.43
3	Sept..	2,519	9.24	Mar.....	2,364	9.08	Mar.....	2,509	9.14	April.	2,224	8.84
4	April..	2,417	8.87	May....	2,284	8.77	Oct.....	2,354	8.57	Mar...	2,215	8.81
5	Mar...	2,381	8.71	Sept....	2,281	8.76	Dec....	2,297	8.37	July..	2,154	8.56
6	May...	2,167	7.95	Dec.....	2,205	8.47	July....	2,272	8.27	May..	2,109	8.39
7	Oct....	2,167	7.95	July....	2,131	8.18	April...	2,216	8.07	Oct....	2,089	8.31
8	Dec....	2,086	7.66	Oct.....	2,096	8.05	Jan.....	2,209	8.04	Dec...	2,037	8.10
9	Jan....	2,036	7.47	Feb.....	2,040	7.83	Nov.....	2,076	7.56	Feb....	1,909	7.59
10	Feb....	2,026	7.44	June....	1,909	7.56	May....	2,073	7.55	Nov...	1,867	7.42
11	June...	2,013	7.39	Jan.....	1,849	7.10	Feb.....	1,940	7.06	June..	1,821	7.24
12	Nov...	1,921	7.05	Nov....	1,831	7.03	June....	1,931	7.03	Jan...	1,795	7.14
	Unk...	66	.24	Unk....	66	.25	Unk....	63	.23	Unk..	58	.23
	Av. ^a ..	2,271	8.33	Av. ^a ...	2,170	8.33	Av. ^a ...	2,288	8.33	Av. ^a ..	2,096	8.33

^a Including deaths in unknown month.

AGES OF PERSONS WHO DIED IN MICHIGAN 1889.

Table 48 gives some important information concerning deaths at different ages. For the year 1889 more than one-fourth of the total number of deaths occurring were those of children under one year of age, and more than one-third were of children under five. The proportion of males and females at different ages can also be seen in this table.

In Massachusetts the percentage of deaths under one year of age in 1889, was 21.79, and that of deaths under 5 was 32.67. As compared with the percentages of those in our own State, they are much lower, and seem to indicate a higher rate of infant mortality in Michigan.

TABLE 48.—*Exhibiting, by sex and by age, in periods of years the number and proportion of persons returned as having died in Michigan during the year 1889.*

Ages in years and periods.	Number of deaths, 1889.				Per cent of deaths at each age to total at all ages.			Per cent of each sex to total of both sexes.				Excess of the sexes by number.		Males to 100 females.
	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Males.	Females.	Excess.		Males.	Females.	
										Males.	Females.			
All ages.....	20,315	10,984	9,297	34	100.00	100.00	100.00	54.16	45.84	8.32	-----	1,687	----	107
Under 1.....	5,283	2,895	2,356	32	26.01	26.36	25.34	55.18	44.87	10.26	-----	589	----	122
1 to 2.....	1,076	571	504	1	5.30	5.20	5.42	53.12	46.88	6.24	-----	67	----	113
2 to 3.....	559	275	288	1	2.75	2.50	3.04	49.28	50.72	.44	-----	8	----	97
3 to 4.....	411	192	219	---	2.02	1.75	2.25	46.72	53.28	6.56	-----	27	----	88
4 to 5.....	385	173	162	---	1.85	1.58	1.74	51.64	48.36	3.28	-----	11	----	106
All under 5.....	7,664	4,106	3,524	34	33.73	37.38	37.90	53.81	46.19	7.62	-----	582	----	110
5 to 10.....	914	468	446	---	4.50	4.26	4.80	51.20	48.80	2.40	-----	22	----	105
10 to 15.....	508	252	256	---	2.50	2.29	2.75	49.61	50.39	.78	-----	4	----	98
15 to 20.....	711	384	377	---	3.50	3.04	4.06	46.98	53.02	6.04	-----	43	----	181
20 to 25.....	940	481	459	---	4.63	4.38	4.94	51.17	48.83	2.34	-----	22	----	105
25 to 30.....	857	447	410	---	4.22	4.07	4.41	52.16	47.84	4.22	-----	37	----	109
30 to 35.....	770	365	405	---	3.79	3.32	4.36	47.40	52.60	5.20	-----	40	----	90
35 to 40.....	687	334	353	---	3.38	3.04	3.80	48.62	51.38	2.76	-----	19	----	95
40 to 45.....	623	333	290	---	3.07	3.03	3.12	53.45	46.55	6.90	-----	43	----	115
45 to 50.....	633	335	298	---	3.12	3.05	2.70	52.92	47.08	5.84	-----	37	----	112
50 to 55.....	642	391	251	---	3.16	3.56	2.96	60.90	39.10	21.80	-----	140	----	156
55 to 60.....	670	395	275	---	3.30	3.60	3.96	58.94	41.06	17.88	-----	120	----	144
60 to 65.....	822	454	368	---	4.05	4.13	3.78	55.23	44.77	10.46	-----	86	----	123
65 to 70.....	908	557	351	---	4.47	5.07	4.18	61.34	38.66	22.68	-----	206	----	159
70 to 75.....	918	529	389	---	4.52	4.82	3.58	57.63	42.37	15.26	-----	140	----	137
75 to 80.....	801	467	334	---	3.94	4.25	2.46	58.30	41.70	16.60	-----	133	----	140
80 to 85.....	544	315	229	---	2.67	2.87	1.30	57.91	42.09	15.82	-----	86	----	138
85 to 90.....	301	180	121	---	1.48	1.64	.45	59.80	40.20	19.60	-----	59	----	149
90 to 95.....	88	46	42	---	.43	.42	.10	52.27	47.73	4.54	-----	4	----	110
95 to 100.....	20	11	9	---	.10	.10	.05	55.00	45.00	10.00	-----	2	----	122
100 and over.....	10	5	5	---	.04	.05	1.13	50.00	50.00	-----	-----	-----	-----	100
Unknown ages.....	284	179	105	---	1.40	1.63	3.21	63.03	36.97	26.06	-----	74	----	170

TABLE 49.—*Exhibiting the per cent of deaths at different ages, for the years 1878-1889, and average for the twelve years.*

Years.	Under 1 year.	Under 5 years.	20 to 30.	All others.
1878.....	25.22	39.22	8.43	52.85
1879.....	24.68	39.52	8.23	52.25
1880.....	24.66	39.95	7.96	52.09
1881.....	24.20	40.63	9.00	50.37
1882.....	24.38	38.81	8.72	52.47
1883.....	24.83	38.26	9.37	52.37
1884.....	27.22	40.05	9.08	50.37
1885.....	26.10	37.61	8.95	53.44
1886.....	26.22	38.79	8.80	52.41
1887.....	25.39	37.94	8.84	53.22
1888.....	27.49	38.96	8.52	52.52
1889.....	26.01	37.72	8.84	42.93
Average.....	25.53	38.85	8.73	51.44

The following tabular exhibit is prepared in order to show the number of deaths at certain periods of age with the number of persons living at the same periods, according to the last census. It is thus seen that the death-rate is much larger for infants under one year of age than for children under five, being more than three times greater. The rates for the same ages in 1888 were 12.07 and 3.75.

	Under 1 Year.	Under 5 years.	20 to 30.	All others.
Deaths, 1889.....	5,238	7,664	1,797	8,721
Population.....	49,415	225,112	351,804	1,230,274
Per cent of deaths to population.....	10.70	3.40	.51	.68

DEATHS BY MONTHS AT DIFFERENT AGES.

The influence of the time of the year in relation to the mortality of persons of different age is set forth in Table 50. As usual the months of July, August and September proved most fatal to children under one year, as well as for all five.

The different ages and comparisons can be learned from the table, which is one of considerable importance and interest.

VITAL STATISTICS OF MICHIGAN, 1889.

TABLE 50.—The relation of the deaths at different periods of age to deaths at all ages, by months; and for the same period of age, the relation of the deaths in each month to the deaths in the year 1889.

Deaths by ages in periods of years.		Months, 1889.												Year, 1889. ^a
		Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	
All ages.....		1,409	1,266	1,676	1,585	1,454	1,389	1,677	2,214	2,025	1,894	1,712	1,561	20,252
Under 1.....	Number.....	328	298	406	363	316	363	589	777	653	431	364	442	5,273
	Per cent of all ages.....	23.28	23.88	24.22	22.27	21.73	26.13	32.14	35.10	32.49	22.75	21.26	22.06	26.04
	Per cent of deaths, 1889.....	6.22	5.61	7.70	6.70	5.99	6.89	10.22	14.74	12.48	8.17	6.90	8.38	100.00
All under 5.....	Number.....	496	440	597	514	477	501	755	1,073	927	655	559	661	7,645
	Per cent of all ages.....	34.49	34.76	35.62	32.43	32.81	36.06	45.02	48.47	45.78	34.58	32.05	33.88	37.75
	Per cent of deaths, 1889.....	6.36	5.75	7.80	6.72	6.24	6.55	9.88	14.03	12.13	8.58	7.31	8.65	100.00
5 to 10.....	Number.....	78	65	81	63	63	55	57	55	65	90	115	127	914
	Per cent of all ages.....	5.54	5.13	4.83	3.96	4.33	3.96	3.40	2.49	3.21	4.75	6.72	6.51	4.51
	Per cent of deaths, 1889.....	8.53	7.11	8.86	6.89	6.89	6.02	6.24	6.02	7.11	9.85	12.58	13.90	100.00
10 to 20.....	Number.....	73	74	95	82	100	79	94	113	123	143	106	130	1,217
	Per cent of all ages.....	5.13	5.35	5.67	5.17	6.88	5.69	5.61	5.10	6.32	7.55	6.19	6.66	6.01
	Per cent of deaths, 1889.....	6.00	6.08	7.80	6.74	8.21	6.49	7.73	9.29	10.52	11.75	8.70	10.69	100.00
20 to 50.....	Number.....	323	284	387	366	389	335	325	423	399	438	403	461	4,503
	Per cent of all ages.....	22.98	22.48	23.09	24.85	23.31	24.12	19.38	19.10	19.70	23.13	23.54	23.63	22.24
	Per cent of deaths, 1889.....	7.17	6.90	8.60	8.57	7.53	7.44	7.22	9.39	8.86	9.73	8.95	10.24	100.00
50 and over.....	Number.....	420	388	496	513	455	399	419	519	452	548	514	555	5,707
	Per cent of all ages.....	29.80	30.65	29.54	32.37	31.29	28.73	24.98	23.44	23.80	28.98	30.02	28.45	28.18
	Per cent of deaths, 1889.....	7.36	6.80	8.65	8.99	7.98	6.99	7.94	9.10	8.45	9.00	9.60	9.71	100.00
Unknown ages.....	Number.....	29	15	21	27	20	20	27	31	24	20	15	17	266
	Per cent of all ages.....	2.08	1.19	1.29	1.70	1.38	1.44	1.61	1.40	1.19	1.06	.88	.87	1.31
	Per cent of deaths, 1889.....	10.90	5.64	7.90	10.15	7.52	7.52	10.15	11.65	9.02	7.52	5.64	6.39	100.00

^a Excluding unknown month.

TABLE 51.—*Exhibiting by sex and by age in periods of years, the number of persons returned, as having died in Michigan during the year 1889.*

Ages in periods of years.	Sex.	Year, 1889.	Months, 1889.											
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December, Unknown.
All ages.....	Totals.....	20,315	1409	1266	1676	1585	1454	1389	1677	2214	2025	1894	1712	1951 63
	Males.....	10,984	751	682	857	851	780	743	945	1190	1079	1068	936	1067 35
	Females.....	9,297	656	582	815	733	673	641	726	1024	942	824	773	881 27
	Unknown.....	34	2	2	4	1	1	5	6	—	4	2	3	3 1
Under 1.....	Totals.....	5,283	328	296	406	353	316	363	539	777	653	481	364	442 10
	Males.....	2,895	187	176	217	200	178	191	297	414	342	233	207	246 7
	Females.....	2,356	139	118	185	152	137	167	238	363	312	196	154	193 2
	Unknown.....	32	2	2	4	1	1	5	4	—	4	2	3	3 1
All under 5.....	Totals.....	7,664	486	440	597	514	477	501	755	1073	927	655	559	661 19
	Males.....	4,106	270	245	311	285	254	263	401	561	486	353	307	358 12
	Females.....	3,524	214	193	282	228	222	233	348	512	437	300	249	300 6
	Unknown.....	34	2	2	4	1	1	5	6	—	4	2	3	3 1
5 to 10.....	Totals.....	914	78	65	81	63	63	55	57	55	65	90	115	127 —
	Males.....	468	29	30	47	32	31	37	39	31	29	40	56	67 —
	Females.....	446	49	35	34	31	32	18	18	24	36	50	59	60 —
10 to 15.....	Totals.....	508	32	32	48	38	38	29	40	48	50	68	45	49 1
	Males.....	252	16	15	24	18	17	12	16	28	24	34	29	19 —
	Females.....	256	16	17	24	15	21	17	24	20	26	29	16	30 1
15 to 20.....	Totals.....	711	41	42	47	49	62	50	54	65	78	80	61	81 1
	Males.....	334	18	25	19	19	33	25	32	30	38	36	24	34 1
	Females.....	377	23	17	28	30	29	25	22	35	40	44	37	47 —
20 to 25.....	Totals.....	940	58	51	79	70	70	69	60	97	103	106	83	92 2
	Males.....	481	26	22	37	37	36	36	32	57	64	60	35	38 1
	Females.....	459	32	29	42	33	34	33	28	40	39	46	48	54 1
25 to 30.....	Totals.....	857	77	55	70	65	64	60	63	72	66	77	87	99 1
	Males.....	447	44	28	34	31	33	26	35	41	32	39	51	52 1
	Females.....	410	33	27	36	35	31	34	28	31	34	38	36	47 —
30 to 35.....	Totals.....	770	49	59	59	75	55	55	59	66	70	66	68	87 2
	Males.....	365	19	31	22	38	25	25	28	22	37	37	29	51 1
	Females.....	405	30	28	37	37	30	30	31	44	33	29	39	36 1

TABLE 51.—CONTINUED.—Deaths by periods of age, by sex, by month.

Ages in periods of years.	Sex.	Year, 1889.	Months, 1889.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
35 to 40.....	Totals.....	687	63	47	57	58	55	70	47	64	46	62	58	59	1
	Males.....	334	32	24	28	32	28	28	23	25	18	37	35	33	
	Females.....	353	31	23	34	26	32	42	24	39	28	25	23	26	---
40 to 45.....	Totals.....	623	34	32	66	59	36	42	50	66	64	59	58	62	---
	Males.....	333	20	14	27	37	16	16	28	43	35	30	29	36	---
	Females.....	290	14	18	39	22	20	26	22	23	29	29	24	24	---
45 to 50.....	Totals.....	633	42	40	56	58	59	39	46	58	50	68	54	62	1
	Males.....	335	23	18	28	21	30	20	29	37	27	42	26	33	1
	Females.....	298	19	22	28	37	29	19	17	21	23	26	28	29	---
50 to 55.....	Totals.....	642	59	46	45	60	47	52	47	59	44	57	61	63	2
	Males.....	391	31	23	27	37	31	30	33	31	25	37	43	37	1
	Females.....	251	28	18	18	23	16	22	14	28	19	20	18	26	1
55 to 60.....	Totals.....	670	37	52	65	66	45	43	64	54	43	66	47	78	---
	Males.....	395	23	33	33	32	30	32	38	32	29	37	25	51	---
	Females.....	275	14	19	32	34	15	16	26	22	19	29	22	27	---
60 to 65.....	Totals.....	822	70	50	81	83	64	56	57	67	61	71	81	77	4
	Males.....	454	40	18	43	45	35	38	31	37	23	43	44	43	4
	Females.....	368	30	32	38	38	29	18	26	30	38	23	37	34	---
65 to 70.....	Totals.....	908	68	50	77	83	34	63	67	86	86	89	84	65	1
	Males.....	557	39	34	43	52	53	45	43	58	52	55	45	38	---
	Females.....	351	29	16	34	31	31	23	24	28	34	34	39	27	1
70 to 75.....	Totals.....	918	56	71	74	95	71	64	57	98	83	90	61	98	---
	Males.....	529	31	38	42	43	37	36	35	54	43	62	42	61	---
	Females.....	389	25	33	32	47	34	28	22	44	40	28	19	37	---
75 to 80.....	Totals.....	901	60	55	60	63	54	52	59	76	82	69	79	89	3
	Males.....	467	32	33	27	39	27	32	35	41	57	41	47	55	1
	Females.....	334	28	22	33	24	27	20	24	35	25	28	32	34	2
80 to 85.....	Totals.....	544	41	41	58	38	52	33	40	38	43	58	52	49	6
	Males.....	315	19	21	34	19	32	17	29	20	30	34	31	27	2
	Females.....	229	22	20	24	14	20	16	11	18	13	24	21	22	4
85 to 90.....	Totals.....	301	20	19	26	22	24	21	15	29	28	29	38	30	---
	Males.....	180	13	13	13	11	16	13	10	16	13	19	21	22	---
	Females.....	121	7	6	13	11	8	8	5	13	15	10	17	8	---
90 to 95.....	Totals.....	88	8	2	6	6	10	3	9	10	6	14	10	4	---
	Males.....	46	3	2	4	2	5	2	6	4	1	10	6	1	---
	Females.....	42	5	---	2	4	5	1	3	6	5	4	4	3	---

DEATHS—BY SEX, BY AGE, BY MONTHS.

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TABLE 51.—CONTINUED.—Deaths by period of age, by sex, by month.

Ages in periods of years.	Sex.	Year, 1889.	Months, 1889.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
95 to 100.	Totals.....	20	1	1		4	2	3	2	1	3	1	1	1	
	Males.....	11	1	1		1		1	2	1	2	1		1	
	Females.....	9				3	2	2			1		1		
100 and over.	Totals.....	10	1	1	2	2		1			2		1		
	Males.....	5	1		1	1		1			1				
	Females.....	5		1	1	1					1		1		
Unknown	Totals.....	284	29	15	21	27	20	20	27	31	24	20	15	17	18
	Males.....	179	22	9	12	15	15	10	20	20	15	14	10	9	8
	Females.....	105	7	6	9	12	5	10	7	11	9	6	5	8	10

TABLE 52.—*Exhibiting by sex, and by months, the number returned as having died in Michigan during the year 1889, at each and every age, the age stated in twelfths of a year, for those under one year, and in years for those over one year of age.*

Ages in years.	Sex.	Year, 1889.	Months, 1889.											
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
Under 1-12.....	Totals.....	2,479	181	161	221	203	167	192	197	228	244	208	217	257
	Males.....	1,417	108	99	117	118	91	97	123	138	142	109	129	141
	Females.....	1,081	71	60	101	84	75	90	70	90	98	92	85	113
	Unknown.....	81	2	2	3	1	1	5	4	4	2	3	3	1
1-12.....	Totals.....	427	25	28	27	25	36	20	45	69	53	29	33	36
	Males.....	221	14	17	12	14	18	14	22	40	21	15	14	19
	Females.....	205	11	11	14	11	18	6	23	29	32	14	19	17
	Unknown.....	1			1									
2-12.....	Totals.....	352	19	16	30	14	16	31	39	60	62	32	11	22
	Males.....	179	10	10	18	5	8	14	20	26	30	18	6	14
	Females.....	173	9	6	12	9	8	17	19	34	32	14	5	8
3-12.....	Totals.....	347	6	16	18	18	19	22	40	72	61	33	18	24
	Males.....	196	4	9	12	12	11	18	23	39	32	22	10	9
	Females.....	151	2	7	6	6	8	9	17	33	29	11	8	15
4-12.....	Totals.....	282	13	12	11	18	21	15	38	64	43	21	12	14
	Males.....	165	6	8	8	10	15	9	21	38	23	13	7	7
	Females.....	117	7	4	3	8	6	6	17	26	20	8	5	7
5-12.....	Totals.....	274	25	9	12	11	8	14	32	65	41	24	18	15
	Males.....	137	11	6	7	8	8	7	16	26	19	12	8	9
	Females.....	137	14	3	5	3		7	16	39	22	12	10	6
6-12.....	Totals.....	262	16	6	20	11	11	19	42	51	40	19	13	14
	Males.....	132	11	3	9	6	8	8	14	27	21	9	9	7
	Females.....	130	5	3	11	5	3	11	28	24	19	10	4	7
7-12.....	Totals.....	204	13	14	10	13	8	9	22	42	33	15	10	14
	Males.....	104	6	9	3	8	2	4	10	22	14	12	4	9
	Females.....	100	7	5	7	5	6	5	12	20	19	3	6	5
8-12.....	Totals.....	186	7	10	18	8	8	11	25	29	22	21	12	15
	Males.....	102	4	7	11	3	3	6	17	13	12	7	7	12
	Females.....	84	3	3	7	5	5	5	8	16	10	14	5	3
9-12.....	Totals.....	188	12	10	17	16	6	11	23	40	18	12	9	14
	Males.....	96	7	3	7	9	3	8	14	19	7	5	5	9
	Females.....	92	5	7	10	7	3	3	9	21	11	7	4	5

DEATHS—BY AGES, BY SEX, BY MONTHS.

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TABLE 52.—CONTINUED.—*Death by ages, by sex, by months.*

Ages in years.	Sex.	Year, 1889.	Months, 1889.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
10-12.....	Totals.....	185	8	6	9	7	13	8	18	26	20	9	5	6	----
	Males.....	71	5	2	5	2	9	3	9	10	13	5	3	5	----
	Females.....	64	3	4	4	5	4	5	9	16	7	4	2	1	----
11-12.....	Totals.....	147	3	8	13	9	3	11	18	31	21	13	6	11	----
	Males.....	75	1	3	8	5	2	8	8	16	8	6	5	5	----
	Females.....	72	2	5	5	4	1	3	10	15	13	7	1	6	----
1.....	Totals.....	1,076	59	69	78	67	70	61	115	162	152	94	65	82	2
	Males.....	571	31	33	44	34	31	35	53	80	91	51	39	43	1
	Females.....	504	28	36	34	33	39	26	61	82	61	43	26	34	1
	Unknown.....	1	----	----	----	----	----	----	1	----	----	----	----	----	----
2.....	Totals.....	559	44	30	46	35	35	27	43	71	54	54	57	56	3
	Males.....	275	25	16	20	19	20	14	21	41	25	23	26	24	1
	Females.....	283	19	14	26	16	15	13	26	30	29	31	31	32	1
	Unknown.....	1	----	----	----	----	----	----	1	----	----	----	----	----	----
3.....	Totals.....	411	28	22	37	28	34	32	35	37	41	36	38	40	3
	Males.....	192	11	7	20	13	15	15	20	15	18	21	15	15	2
	Females.....	219	17	15	17	10	19	17	15	22	23	15	23	25	1
4.....	Totals.....	335	27	23	30	31	22	13	14	26	22	40	35	41	2
	Males.....	173	16	13	10	14	10	8	10	11	10	25	20	25	1
	Females.....	162	11	10	20	17	12	10	8	15	12	15	15	16	1
5.....	Totals.....	264	22	17	33	22	20	10	13	16	17	21	38	35	----
	Males.....	131	11	7	13	10	6	6	11	9	7	7	22	17	----
	Females.....	133	11	10	15	12	14	4	2	7	10	14	16	18	----
6.....	Totals.....	190	16	15	13	16	11	12	12	15	8	24	27	21	----
	Males.....	101	7	8	8	10	7	8	8	9	4	10	11	11	----
	Females.....	89	9	7	5	6	4	4	4	6	4	14	16	10	----
7.....	Totals.....	190	15	10	13	10	19	13	14	12	15	16	24	29	----
	Males.....	108	5	7	10	6	12	10	10	6	6	6	12	13	----
	Females.....	82	10	3	3	4	7	3	4	6	9	10	12	11	----
8.....	Totals.....	153	13	13	10	7	6	13	9	6	13	19	15	24	----
	Males.....	76	2	6	6	3	2	8	7	5	7	11	7	12	----
	Females.....	77	11	12	4	4	4	5	2	1	6	8	8	12	----
9.....	Totals.....	117	12	5	12	8	7	7	9	6	12	10	11	13	----
	Males.....	52	4	2	5	3	4	5	3	2	5	6	4	9	----
	Females.....	65	8	3	7	5	3	2	6	4	7	4	7	9	----
10.....	Totals.....	99	4	3	7	6	8	4	3	11	11	11	10	15	1
	Males.....	54	2	2	5	6	4	2	3	5	6	7	6	6	----
	Females.....	45	2	1	2	----	4	2	5	6	5	4	4	9	1

VITAL STATISTICS OF MICHIGAN, 1889.

TABLE 52.—CONTINUED.—Deaths by ages, by sex, by months.

Ages in years.	Sex.	Year, 1889.	Months, 1889.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
11.....	Totals	114	7	14	9	7	9	9	5	14	9	16	6	9	-----
	Males	54	4	7	3	3	3	4	3	11	4	9	2	1	-----
	Females	60	3	7	6	4	6	5	2	3	5	7	4	8	-----
12.....	Totals	99	7	4	15	6	6	5	10	7	10	10	10	9	-----
	Males	53	3	2	8	2	3	2	3	5	6	5	7	7	-----
	Females	46	4	2	7	4	3	3	7	2	4	5	3	2	-----
13.....	Totals	99	6	8	9	6	8	8	8	5	11	11	12	7	-----
	Males	48	3	2	4	5	5	4	3	2	4	6	8	2	-----
	Females	51	3	6	5	1	3	4	5	3	7	5	4	5	-----
14.....	Totals	97	8	3	8	8	7	3	9	11	9	15	7	9	-----
	Males	43	4	2	4	2	2	-----	4	5	4	7	6	3	-----
	Females	54	4	1	4	6	5	3	5	6	5	8	1	6	-----
15.....	Totals	117	7	7	10	14	11	10	9	10	7	15	10	7	-----
	Males	55	3	4	5	6	6	4	8	4	3	6	2	4	-----
	Females	62	4	3	5	8	5	6	1	6	4	9	8	3	-----
16.....	Totals	111	6	9	5	8	13	6	9	8	17	10	5	14	1
	Males	53	4	5	1	3	7	4	7	2	7	3	2	7	1
	Females	58	2	4	4	5	6	2	2	6	10	7	3	7	-----
17.....	Totals	146	7	7	11	6	13	11	12	12	17	19	12	19	-----
	Males	71	3	3	5	3	8	6	6	4	10	10	5	8	-----
	Females	75	4	4	6	3	5	5	6	8	7	9	7	11	-----
18.....	Totals	162	9	11	11	8	13	15	12	14	14	16	20	19	-----
	Males	76	3	6	3	3	5	6	6	11	7	8	10	8	-----
	Females	86	6	5	8	5	8	9	6	3	7	8	10	11	-----
19.....	Totals	175	12	8	10	13	12	8	12	21	23	20	14	22	-----
	Males	79	5	7	5	4	7	5	5	9	11	9	5	7	-----
	Females	96	7	1	5	9	5	3	7	12	12	11	9	15	-----
20.....	Totals	215	19	3	14	13	18	13	15	21	25	20	19	23	2
	Males	122	10	4	5	8	11	8	10	15	16	12	8	14	1
	Females	93	9	4	9	5	7	5	5	6	9	8	11	14	1
21.....	Totals	175	10	11	16	12	10	13	10	18	12	30	16	17	-----
	Males	85	7	7	6	5	2	7	6	9	9	17	7	3	-----
	Females	90	3	4	10	7	3	6	4	9	3	13	9	14	-----
22.....	Totals	194	12	11	16	17	11	12	13	24	26	14	19	19	-----
	Males	103	5	2	9	10	7	3	6	14	15	9	3	10	-----
	Females	91	7	9	7	7	4	4	7	10	11	5	11	9	-----

TABLE 52.—CONTINUED.—Deaths by ages, by sex, by months.

Ages in years.	Sex.	Year, 1889.	Months, 1889.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
23	Totals.....	159	6	9	19	17	17	15	13	10	16	19	9	9	---
	Males.....	76	1	2	10	9	8	7	6	2	11	11	4	5	---
	Females.....	83	5	7	9	8	9	8	7	8	5	8	5	4	---
24	Totals.....	197	11	12	14	11	14	16	9	24	24	23	20	19	---
	Males.....	95	3	7	7	5	8	6	4	17	13	11	8	6	---
	Females.....	102	8	5	7	6	6	10	5	7	11	12	12	13	---
25	Totals.....	163	14	12	17	15	13	13	12	6	10	19	15	17	---
	Males.....	84	8	8	5	5	10	6	6	4	5	10	10	7	---
	Females.....	79	6	4	12	10	3	7	6	2	5	9	5	10	---
26	Totals.....	171	17	10	14	12	14	8	8	12	19	17	17	23	---
	Males.....	83	10	2	8	7	9	2	5	5	8	8	9	10	---
	Females.....	88	7	8	6	5	5	6	3	7	11	9	8	13	---
27	Totals.....	157	13	14	12	11	11	13	12	18	7	17	16	13	---
	Males.....	82	6	7	6	3	5	6	7	11	3	8	9	11	---
	Females.....	75	7	7	6	8	6	7	5	7	4	9	7	2	---
28	Totals.....	199	17	12	12	18	14	14	16	21	14	13	20	28	---
	Males.....	121	13	6	7	10	8	8	9	15	7	7	14	17	---
	Females.....	78	4	6	5	8	6	6	7	6	7	6	6	11	---
29	Totals.....	187	16	7	15	10	12	12	15	15	16	11	19	18	1
	Males.....	77	7	5	8	6	1	4	8	6	9	6	9	7	1
	Females.....	90	9	2	7	4	11	8	7	9	7	5	10	11	---
30	Totals.....	191	12	13	17	12	19	17	21	12	20	13	15	20	---
	Males.....	96	6	5	5	6	10	7	10	6	11	7	9	14	---
	Females.....	95	6	8	12	6	9	10	11	6	9	6	6	6	---
31	Totals.....	124	9	7	9	21	5	8	9	9	11	9	10	16	1
	Males.....	65	4	5	5	12	4	2	5	4	8	4	2	9	1
	Females.....	59	5	2	4	9	1	6	4	5	3	5	8	7	---
32	Totals.....	171	11	11	13	14	8	10	15	19	10	20	19	21	---
	Males.....	72	1	5	5	7	2	4	4	5	1	12	13	13	---
	Females.....	99	10	6	8	7	6	6	11	14	9	8	6	8	---
33	Totals.....	153	12	15	7	14	12	12	7	12	14	16	14	17	1
	Males.....	70	6	6	4	9	4	9	4	4	6	8	2	8	---
	Females.....	83	6	9	3	5	8	3	3	8	8	8	12	9	1
34	Totals.....	131	5	13	13	14	11	8	7	14	15	8	10	13	---
	Males.....	62	2	10	3	4	5	3	5	3	11	6	3	7	---
	Females.....	69	3	3	10	10	6	5	2	11	4	2	7	6	---

TABLE 52.—CONTINUED.—*Deaths by ages, by sex, by months.*

Ages in years.	Sex.	Year, 1889.	Months, 1889.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
35	Totals	157	18	9	16	7	12	12	9	17	13	15	18	16	
	Males	83	8	7	7	4	8	8	6	4	7	9	12	8	
	Females	74	10	2	9	3	4	9	3	13	6	6	1	8	
36	Totals	146	19	13	15	13	5	11	8	13	5	16	16	12	
	Males	75	11	9	5	10	1	6	6	4	1	9	5	8	
	Females	71	8	4	10	3	4	5	2	9	4	7	11	4	
37	Totals	108	12	5	8	8	20	11	6	7	7	9	5	9	
	Males	54	3	2	4	6	9	7	1	4	4	5	3	5	
	Females	54	9	3	4	2	11	4	5	3	3	4	2	4	
38	Totals	146	9	10	11	17	7	18	12	13	11	14	11	13	
	Males	65	5	2	4	8	2	5	6	7	3	9	7	7	
	Females	81	4	8	7	9	5	13	6	6	8	5	4	6	
39	Totals	180	5	10	7	13	11	18	12	14	10	8	13	9	
	Males	57	5	4	3	4	3	7	4	6	3	5	3	5	
	Females	78		6	4	9	8	11	8	8	7	3	5	4	
40	Totals	132	12	6	15	14	10	5	15	13	13	10	6	13	
	Males	76	8	1	9	6	3	1	9	9	10	5	5	10	
	Females	56	4	5	6	8	7	4	6	4	3	5	1	3	
41	Totals	94	4	6	11	11	8	4	10	9	4	12	6	9	
	Males	56	3	2	2	9	4	3	5	8	3	6	4	7	
	Females	38	1	4	9	2	4	1	5	1	1	6	2	2	
42	Totals	138	4	8	18	14	5	7	13	12	22	14	10	11	
	Males	72		4	6	11	4	2	8	7	13	6	4	7	
	Females	66	4	4	12	3	1	5	5	5	9	8	6	4	
43	Totals	151	6	9	18	11	5	15	8	19	11	14	15	20	
	Males	71	2	4	9	5		5	5	12	4	8	7	10	
	Females	80	4	5	9	6	5	10	3	7	7	6	8	10	
44	Totals	108	8	3	4	9	8	11	4	13	14	9	16	9	
	Males	58	7	3	1	6	5	5	1	7	5	5	9	4	
	Females	50	1		3	3	3	6	3	6	9	4	7	5	
45	Totals	150	8	8	14	14	14	11	11	14	14	17	10	15	
	Males	84	5	5	6	5	5	7	6	12	8	13	3	9	
	Females	66	3	3	8	9	9	4	5	2	6	4	7	6	
46	Totals	108	7	10	8	11	8	5	4	16	8	13	9	9	
	Males	51	3	4	2	3	3	3	3	9	5	7	5	4	
	Females	57	4	6	6	8	5	2	1	7	3	6	4	5	

TABLE 52.—CONTINUED.—*Deaths by ages, by sex, by months.*

Ages in years.	Sex.	Year. 1889.	Months, 1889.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
47.....	Totals	109	5	7	8	12	13	8	7	7	11	11	11	9	.....
	Males	56	2	2	4	4	10	3	5	5	4	7	6	4	.....
	Females	53	3	5	4	8	3	5	2	2	7	4	5	5	.....
48.....	Totals	134	8	6	14	12	10	9	9	9	13	17	11	15	1
	Males	70	4	3	6	5	4	3	7	5	8	11	5	8	1
	Females	64	4	3	8	7	6	6	2	4	5	6	6	7	.....
49.....	Totals	132	14	9	12	9	14	6	15	12	4	10	13	14	.....
	Males	74	9	4	10	4	8	4	8	6	2	4	7	8	.....
	Females	58	5	5	2	5	6	2	7	6	2	6	6	6	.....
50.....	Totals	138	12	12	7	13	12	14	7	12	9	8	17	14	1
	Males	87	7	8	2	11	6	9	5	9	5	4	13	7	1
	Females	51	5	4	5	2	6	5	2	3	4	4	4	7	.....
51.....	Totals	108	9	10	9	6	10	11	10	10	6	6	5	11	.....
	Males	56	5	7	4	5	5	3	7	3	2	4	5	6	.....
	Females	47	4	3	5	1	5	8	3	7	4	2	.....	5	.....
52.....	Totals	187	13	6	9	12	9	11	5	14	11	16	16	15	.....
	Males	85	4	5	5	5	6	6	5	8	7	13	11	10	.....
	Females	52	9	1	4	7	3	5	.....	6	4	3	5	5	.....
53.....	Totals	125	13	5	11	15	11	9	9	6	12	16	6	12	.....
	Males	81	9	3	10	9	10	5	7	4	6	9	3	6	.....
	Females	44	4	2	1	6	1	4	2	2	6	7	3	6	.....
54.....	Totals	139	12	13	9	14	5	7	16	17	6	11	17	11	1
	Males	82	6	5	6	7	4	7	9	7	5	7	11	8	.....
	Females	57	6	8	3	7	1	.....	7	10	1	4	6	3	1
55.....	Totals	109	7	11	9	13	5	9	15	5	8	8	4	15	.....
	Males	67	5	6	4	9	3	6	10	1	4	4	3	12	.....
	Females	42	2	5	5	4	2	3	5	4	4	4	1	3	.....
56.....	Totals	147	5	6	13	8	9	12	15	12	13	19	9	21	.....
	Males	86	2	3	7	1	6	8	11	7	8	11	8	14	.....
	Females	61	3	3	11	7	3	4	4	5	5	8	1	7	.....
57.....	Totals	114	8	6	7	11	11	5	6	9	8	10	13	20	.....
	Males	64	4	3	5	6	7	5	2	5	5	5	6	11	.....
	Females	50	4	3	2	5	4	.....	4	4	3	5	7	9	.....
58.....	Totals	147	12	17	19	11	11	6	15	14	11	10	10	11
	Males	90	10	12	10	7	7	4	7	9	7	6	5	6
	Females	57	2	5	9	4	4	2	8	5	4	4	5	5

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TABLE 52.—CONTINUED.—Deaths by ages, by sex, by months.

Ages in years.	Sex.	Year, 1889.	Months, 1889.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
59.....	Totals.....	153	5	12	12	23	9	16	13	14	8	19	11	11	---
	Males.....	88	2	9	7	9	7	9	8	10	5	11	3	8	---
	Females.....	65	3	3	5	14	2	7	5	4	3	8	8	3	---
60.....	Totals.....	171	7	14	21	14	14	14	17	14	12	12	20	12	---
	Males.....	91	5	6	9	9	6	11	10	9	8	8	9	6	---
	Females.....	80	2	8	12	5	8	3	7	5	9	4	11	6	---
61.....	Totals.....	135	9	7	14	18	11	11	6	11	14	9	7	18	---
	Males.....	89	7	3	13	11	8	5	3	8	8	3	6	14	---
	Females.....	46	2	4	1	7	3	6	3	3	6	6	1	4	---
62.....	Totals.....	174	22	8	14	21	12	9	10	14	11	18	17	16	2
	Males.....	90	11	4	6	15	6	4	5	6	6	12	6	7	2
	Females.....	84	11	4	8	6	6	5	5	8	5	6	11	9	---
63.....	Totals.....	188	17	12	19	17	17	13	11	13	14	20	17	17	1
	Males.....	110	9	4	11	6	12	10	9	6	8	17	12	10	1
	Females.....	78	8	8	8	11	5	3	2	7	11	3	5	7	---
64.....	Totals.....	154	15	9	13	13	10	9	13	15	10	12	20	14	1
	Males.....	74	8	1	9	4	3	8	4	8	8	8	11	6	1
	Females.....	80	7	8	4	9	7	1	9	7	7	4	9	8	---
65.....	Totals.....	204	16	11	20	19	19	14	13	19	16	25	19	13	---
	Males.....	128	11	6	9	13	11	10	8	14	9	16	13	8	---
	Females.....	76	5	5	11	6	8	4	5	5	7	9	6	5	---
66.....	Totals.....	162	16	8	13	13	11	15	8	19	13	12	10	14	---
	Males.....	93	5	4	8	14	6	7	4	12	13	6	6	8	---
	Females.....	69	11	4	5	4	5	8	4	7	5	6	4	6	---
67.....	Totals.....	179	10	11	17	10	21	13	18	14	19	18	19	9	---
	Males.....	107	5	9	10	6	13	11	10	6	13	11	7	6	---
	Females.....	72	5	2	7	4	8	2	8	8	6	7	12	3	---
68.....	Totals.....	174	13	12	12	19	19	11	17	12	16	13	16	13	1
	Males.....	115	9	10	6	10	14	8	13	8	12	7	9	9	---
	Females.....	59	4	2	6	9	5	3	4	4	4	6	7	4	1
69.....	Totals.....	189	13	8	15	17	14	15	11	22	17	21	20	16	---
	Males.....	114	9	5	10	9	9	9	8	18	5	15	10	7	---
	Females.....	75	4	3	5	8	5	6	3	4	12	6	10	9	---
70.....	Totals.....	208	13	14	12	27	9	13	11	23	16	22	13	25	---
	Males.....	123	12	9	8	17	5	12	6	9	9	14	8	14	---
	Females.....	85	6	5	4	10	4	6	5	14	7	8	5	11	---

DEATHS—BY AGES, BY SEX, BY MONTHS.

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TABLE 52.—CONTINUED.—*Deaths by ages, by sex, by months.*

Ages in years.	Sex.	Year, 1889.	Months, 1889.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
71.....	Totals.....	153	7	12	15	19	19	7	6	20	7	18	11	12	---
	Males.....	86	2	6	5	9	7	3	6	14	3	16	7	8	---
	Females.....	67	5	6	10	10	12	4	---	6	4	2	4	4	---
72.....	Totals.....	200	8	19	14	13	23	14	18	20	26	12	11	22	---
	Males.....	115	5	8	10	6	15	7	10	9	14	10	8	13	---
	Females.....	85	3	11	4	7	8	7	8	11	12	2	3	9	---
73.....	Totals.....	171	11	16	18	21	10	10	9	14	15	18	11	18	---
	Males.....	89	4	9	10	9	7	3	6	9	6	9	6	11	---
	Females.....	82	7	7	8	12	3	7	3	5	9	9	5	7	---
74.....	Totals.....	186	12	10	15	15	10	15	13	21	19	20	15	21	---
	Males.....	116	8	6	9	7	3	11	7	13	11	13	13	15	---
	Females.....	70	4	4	6	8	7	4	6	8	8	7	2	6	---
75.....	Totals.....	189	12	15	17	16	11	11	9	19	22	14	20	23	---
	Males.....	118	8	11	5	13	9	6	5	11	16	7	11	16	---
	Females.....	71	4	4	12	3	2	5	4	8	6	7	9	7	---
76.....	Totals.....	155	10	11	8	9	4	10	22	13	16	12	18	19	3
	Males.....	93	5	7	4	5	---	6	15	9	11	8	11	11	1
	Females.....	62	5	4	4	4	4	4	7	4	5	4	7	8	2
77.....	Totals.....	154	8	10	14	10	13	13	10	13	18	12	16	17	---
	Males.....	89	4	7	9	5	6	10	6	8	13	4	9	8	---
	Females.....	65	4	3	5	5	7	3	4	5	5	8	7	9	---
78.....	Totals.....	161	11	10	9	11	17	8	13	22	15	16	13	16	---
	Males.....	84	5	4	2	4	9	4	6	9	10	13	9	9	---
	Females.....	77	6	6	7	7	8	4	7	13	5	3	4	7	---
79.....	Totals.....	142	19	9	12	17	9	10	5	9	11	15	12	14	---
	Males.....	83	10	4	7	12	3	6	3	4	7	9	7	11	---
	Females.....	59	9	5	5	5	6	4	2	5	4	6	5	3	---
80.....	Totals.....	108	7	9	12	3	12	4	9	7	7	11	13	11	3
	Males.....	64	5	4	5	1	6	2	8	4	6	6	10	6	1
	Females.....	44	2	5	7	2	6	2	1	3	1	5	3	5	2
81.....	Totals.....	106	10	12	13	6	13	7	4	5	8	12	9	7	---
	Males.....	63	6	6	7	4	11	5	3	3	4	6	4	4	---
	Females.....	43	4	6	6	2	2	2	1	2	4	6	5	3	---
82.....	Totals.....	123	7	9	6	6	5	8	11	16	12	13	14	14	2
	Males.....	65	1	4	3	3	1	3	9	9	8	7	6	10	1
	Females.....	58	6	5	3	3	4	5	2	7	4	6	8	4	---

TABLE 52.—CONTINUED.—Deaths by ages, by sex, by months.

Ages in years.	Sex.	Year, 1889.	Months, 1889.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
83.....	Totals	99	9	4	15	8	9	7	7	4	9	10	6	10	1
	Males	59	4	3	11	5	5	3	4	2	6	7	4	5	---
	Females	40	5	1	4	3	4	4	3	2	3	3	2	5	1
84.....	Totals	108	8	7	12	10	13	7	9	6	7	12	10	7	---
	Males	64	3	4	8	6	9	4	5	2	6	8	7	2	---
	Females	44	5	3	4	4	4	3	4	4	1	4	3	5	---
85.....	Totals	80	5	5	8	7	7	2	5	3	8	10	10	10	---
	Males	43	3	2	5	2	5	1	5	1	2	4	5	8	---
	Females	37	2	3	3	5	2	1	---	2	6	6	5	2	---
86.....	Totals	72	3	5	7	4	2	11	8	6	6	8	6	6	---
	Males	45	2	3	3	2	2	9	5	4	2	5	3	5	---
	Females	27	1	2	4	2	---	2	3	2	4	3	3	1	---
7.....	Totals	61	7	3	5	4	5	2	1	10	6	6	9	3	---
	Males	40	5	3	3	4	3	---	---	5	3	6	5	3	---
	Females	21	2	---	2	---	2	2	1	5	3	---	4	---	---
88.....	Totals	45	5	1	4	6	5	3	1	6	4	2	4	4	---
	Males	24	3	1	1	3	3	2	---	3	3	1	3	1	---
	Females	21	2	---	3	3	2	1	1	3	1	1	1	3	---
89.....	Totals	43	---	5	2	1	5	3	---	4	4	3	9	7	---
	Males	23	---	4	1	---	3	1	---	3	3	3	5	5	---
	Females	15	---	1	1	1	2	2	---	1	1	---	4	2	---
90.....	Totals	32	3	---	1	3	2	2	7	4	2	3	3	2	---
	Males	20	1	---	1	2	1	2	5	2	1	2	2	1	---
	Females	12	2	---	---	1	1	---	2	2	1	1	1	1	---
91.....	Totals	15	---	1	1	1	2	---	1	1	1	6	---	1	---
	Males	8	---	1	---	---	1	---	1	---	---	5	---	---	---
	Females	7	---	---	1	1	1	---	---	1	1	1	---	1	---
92.....	Totals	19	3	1	2	1	1	---	---	1	2	2	5	1	---
	Males	8	1	1	2	---	---	---	---	---	---	1	3	---	---
	Females	11	2	---	---	1	1	---	---	1	2	1	2	1	---
93.....	Totals	11	---	---	1	1	4	1	---	2	---	1	1	---	---
	Males	5	---	---	1	---	2	---	---	1	---	1	---	---	---
	Females	6	---	---	---	1	2	1	---	1	---	---	1	---	---
94.....	Totals	11	2	---	1	---	1	---	1	2	1	2	1	---	---
	Males	5	1	---	---	---	1	---	---	1	---	1	1	---	---
	Females	6	1	---	1	---	---	---	1	1	1	1	---	---	---

DEATHS—BY AGES, BY SEX, BY MONTHS.

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TABLE 52.—CONTINUED.—*Deaths by ages, by sex, by months.*

Ages in years.	Sex.	Year, 1889.	Months, 1889.												
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.
95	Totals	10	1	1		2	1		1	1	1		1	1	
	Males	6	1	1		1			1	1				1	
	Females	4				1	1				1		1		
96	Totals	5				1		2	1			1			
	Males	2							1			1			
	Females	3				1		2							
97	Totals	2				1		1							
	Males	1						1							
	Females	1				1									
98	Totals	2					1				1				
	Males	1									1				
	Females	1					1								
99	Totals	1									1				
	Males	1									1				
	Females														
100 and over	Totals	10	1	1	2	2			1			2		1	
	Males	5	1		1	1			1			1			
	Females	5		1	1	1						1		1	
Unknown	Totals	284	29	15	21	27	20	20	27	31	24	20	15	17	18
	Males	179	22	9	12	15	15	10	20	20	15	14	10		8
	Females	105	7	6	9	12	5	10	7	11	9	6	5		0

DEATHS—INFANT MORTALITY.

INFANT MORTALITY.

The return of still births for 1889 was 1,202, a less number than for 1888 when 1,358 were reported, which was the most returned for any year of the registration. As will be seen the number for 1889 is much larger than the average for ten years.

TABLE 53.—*The relation of still births to all deaths as returned for the years 1887-1889, and the average for ten years 1879-1888, corrected by means of the returns of births.*

	Total deaths and still births.			
	1887.	1888.	1889.	Average for 10 years 1879-1888.
All deaths.....	19,482	21,764	20,815	17,721
Number of still births.....	897	1,358	1,202	896
Per cent of still births to total deaths.....	4.60	6.24	5.92	5.06

RELATIONS OF DEATHS OF CHILDREN UNDER ONE TO BIRTHS.

Tables 54, 55 and 56 are designed to show the influence of the different seasons upon the lives of young children. A complete description of table 54 was given on page 108 of the report for 1884. It has been omitted in the reports since, as it was thought no difficulty will be experienced in understanding it.

Table 55 shows the number of children who where born in each month during the year 1888 and who died in 1888 and 1889 under one year. The number of deaths and births, and proportion for each sex and every month can be seen by this table.

In table 56 the ages and months of death of children who died under one year of age are given. The first column of figures at the left of the table shows the number of children born in 1888, and in each month of that year who died before reaching the age of one year. The first diagonal column shows that a very large proportion of the children die during the month of birth, or under one month old. Of the 463 children born in January, 1888, 194 died in the month of birth, 24 in February, and so on through the year. The last column in the table shows what per cent of the children born in each month of the year 1888 died during the month of birth.

TABLE 54.—Exhibiting, by sex, the number of children under one year of age, returned as having died in Michigan during the year 1889, distinguishing the months in which they died, their age in months at deaths, the months in which they were born, and whether born in year of death, or in previous year.

Months in	Number born in each month of year of death.	Number of children who died at each age in months.	Number born in each month of year previous to year	Deaths by months.
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TABLE 55.—Of the children born in 1888, the number who died during the year 1888, the number who died during the year 1889, under one year of age, and the per cent of the decedents under one year to children born in 1888, according to the returns.

Months of births.	Born in 1888.				Males born in 1888.				Females born in 1888.						
	Births in 1888, as returned.	Died during the year 1888.	Died aged under 1 year during the year 1889.	Total died aged under 1 year.	Per cent of deaths under 1 to births.	Births of males, 1888, as returned.	Died during the year 1888.	Died aged under 1 year during the year 1889.	Total died aged under 1 year.	Per cent of deaths under 1 to births.	Births of females 1888, as returned.	Died during the year 1888.	Died aged under 1 year during the year 1889.	Total died aged under 1 year.	Per cent of deaths under 1 to births.
Totals a.	48,907	4,802	920	5,782	11.82	25,502	2,774	492	3,296	12.81	23,483	2,088	428	2,516	10.71
January	3,531	463	-----	463	13.11	1,829	249	-----	249	13.61	1,699	214	-----	214	12.60
February	3,516	491	8	494	14.05	1,843	282	1	283	15.36	1,689	209	2	211	12.64
March	4,099	506	16	522	12.73	2,120	287	8	295	13.91	1,979	219	8	227	11.47
April	3,953	531	31	562	14.22	2,067	286	17	303	14.68	1,883	245	14	259	13.75
May	4,214	463	35	498	11.82	2,174	263	17	280	12.88	2,088	200	18	218	10.70
June	4,183	424	50	474	11.47	2,116	240	24	264	12.48	2,016	184	26	210	10.42
July	4,223	403	88	491	11.63	2,190	231	57	288	13.15	2,080	172	31	203	10.00
August	4,514	431	81	512	11.34	2,393	254	84	288	12.04	2,122	177	47	224	10.56
September	4,415	314	123	437	9.90	2,268	191	65	256	11.29	2,145	123	58	181	8.44
October	4,805	285	130	415	9.64	2,345	156	65	221	9.84	2,059	129	65	194	9.42
November	3,811	260	175	435	11.41	1,959	151	102	253	12.91	1,850	109	73	182	9.84
December	4,193	291	188	479	11.42	2,298	184	102	286	12.45	1,898	107	86	193	10.19

^a Excluding 45 in unknown months.

TABLE 56.—The months of births and of deaths of children born in 1888, who died under one year of age.

Months of births, 1888.	Months of death, 1888.												Months of death, 1889.												Per cent of children who died aged under 1 month to all children born.	
	Months of death, 1888.												Months of death, 1889.													
	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.		Per cent died aged under 1 month, ^a	Births in 1888 as returned,^{b}
Born in 1888, died aged under 1 year.....	5,782	194	229	278	324	371	346	484	710	588	417	399	522	147	107	128	93	57	69	106	126	59	22	6	48,952	Per cent of children who died aged under 1 month to all children born.
January.....	463	194	24	23	23	23	17	40	47	30	22	10	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41.90	5.49
February.....	494	205	37	32	32	32	23	36	56	30	19	12	9	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41.50	5.83
March.....	522	.....	218	36	36	28	38	56	48	20	12	14	8	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41.76	5.82
April.....	562	.....	.....	233	39	37	54	72	52	18	8	18	12	6	13	.....	.....	.....	.....	.....	.....	.....	.....	.....	41.44	5.89
May.....	498	.....	.....	.....	241	28	42	63	47	12	12	18	7	10	9	9	.....	.....	.....	.....	.....	.....	.....	.....	48.39	5.72
June.....	474	.....	.....	.....	.....	213	47	57	45	19	21	22	13	10	17	7	3	.....	.....	.....	.....	.....	.....	.....	44.94	5.15
July.....	491	.....	.....	.....	.....	.....	227	66	51	32	9	18	16	14	18	16	13	11	.....	.....	.....	.....	.....	.....	46.23	5.38
August.....	512	.....	.....	.....	.....	.....	.....	233	60	34	25	19	25	6	10	8	6	8	18	.....	.....	.....	.....	.....	57.23	6.49
September.....	437	.....	.....	.....	.....	.....	.....	.....	225	31	33	25	13	9	20	13	8	11	18	31	.....	.....	.....	.....	57.49	5.10
October.....	415	.....	.....	.....	.....	.....	.....	.....	.....	210	33	42	6	12	12	11	8	11	23	26	21	.....	.....	.....	50.60	4.88
November.....	435	.....	.....	.....	.....	.....	.....	.....	.....	.....	224	36	19	16	11	11	11	11	9	25	40	20	13	.....	52.62	5.87
December.....	479	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	201	25	16	18	18	8	19	22	29	18	9	6	.....	60.65	6.94
Deaths at { No. of deaths each age. { Ages in Mos.	5,782	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	274	462	422	367	304	277	279	272	195	201	148	146	47.98	5.67

^a That is, per cent of children who died during month of birth to total born in 1888 who died aged under one year.

^b Excluding 45 in unknown months—24 males, 19 females, and 2 of unknown sex.

^c That is, of the children born in 1888, the per cent who died during month of birth—according to the returns of births and deaths. It should be borne in mind that probably a larger proportion of the births and of the deaths are returned for the later months of the year.

TABLE 57.—The relation, by months, of the decedents aged under one month to the births returned for the year 1889.

Sex, etc., specified.	Year, 1889.	Months, 1889.												
		Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
Totals.	Births.....	3,340	3,104	4,001	4,057	4,238	4,050	4,252	4,526	4,382	4,292	4,331	4,646	53
	Deaths aged under one month *.....	181	161	221	203	187	192	197	228	244	203	217	257	8
	Per cent of deaths to births.....													
Males.	Births.....	1,756	1,607	2,128	2,081	2,181	2,096	2,256	2,370	2,275	2,247	2,252	2,368	25
	Deaths aged under one month.....	1,417	99	117	118	91	97	123	138	142	109	129	141	5
	Per cent of deaths to births.....													
Females.	Births.....	23,532	1,495	1,867	1,974	2,056	1,960	1,991	2,152	2,101	2,041	2,075	2,275	23
	Deaths aged under one month.....	1,031	71	101	84	75	90	70	90	98	93	85	113	2
	Per cent of deaths to births.....													
Unknown.	Births.....	43	2	6	2	1	4	5	4	6	4	4	3	5
	Deaths aged under one month.....	31	2	3	1	1	5	4	-----	4	2	3	3	1

* Still-births included.

TABLE 58.—Exhibiting certain details concerning persons returned as having died aged one hundred years and over during the year 1889.

Names of Centenarians, 1889.	Sex.	Color.	Married, Single or Widowed.	Birthplace.	Age.			Occupation.	Place of death.		Date of death, 1889.		Cause of Death.
					Year.	Month.	Day.		Town.	County.	Month.	Day.	
Charlotte Sanders	Female.	Black.	Unknown	Unknown	107			Unknown	Jefferson	Cass	October	12	Old age.
Lewis Houseman	Male	White	Married	Penn.	108			Unemploy'd	Petoakey	Emmet	July	15	Old age.
Sarah Campbell	Female.	White	Widow.	New York	102	7		Housekeeper	Blackman	Jackson	April	20	Old age.
Adam Dutcher	Male	White	Widower.	New York	100			Farmer	Woodstock	Lenawee	March	13	Old age.
Charlotte Godfrey	Female.	Indian.	Widow	Michigan	108			Unknown	Ontonagon	Ontonagon	March	9	Old age.
Z. W. Bunce	Male	White	Single	Conn.	101	10	23	Unemploy'd	Port Huron	St. Clair	October	8	Old age.
Helen Morton	Female.	White	Unknown	Unknown	110			Unknown	Pittsfield	Washtenaw	December	7	Old age.
Mary M'Carty	Female.	White	Widow	Ireland	100			Unknown	Scio	Washtenaw	February	1	Old age.
Matthew Watson	Male.	Black.	Married	Mass.	106	1	1	Merchant	Detroit	Wayne	January	5	Old age.
Gardner Barber	Male	White	Married	New York	108		5	Farmer	Plymouth	Wayne	April	17	Old age.

TABLE 59.—*Counties and townships from which no returns of deaths for 1889 were received by this department, showing population in 1884.*

Counties.		Townships from which no returns of deaths for 1889 were received.	Population, June, 1884.																		
			Totals.						Color or race.						Nativity.						
			Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Unknown.
Totals	6,813	4,072	2,741	6,634	3,967	2,667	8	8	8	118	66	52	53	31	22	2,481	2,069	1,578	678	13	4
Chippewa	Detour	615	384	231	565	353	212	8	8	1	1	1	41	23	18	123	76	260	154	1	1
	Superior	680	408	272	557	339	218			115	65	50	8	4	4	179	141	227	131	2	
	Trout Lake a White Fish a																				
Delta	Minnewaska a																				
Gladwin	Billings	83	50	33	83	50	33									33	26	17	7		
	Buckeye	102	63	39	102	63	39									44	33	19	6		
	Sage	112	69	43	112	69	43									41	35	28	8		
Iron a.	Felch Mastodon																				
Lake	Eden	71	46	25	71	46	25									38	24	13	1		
	Glencoe	72	40	32	72	40	32									34	30	6	2		
Lenawee	Rome	1,289	675	614	1,289	675	614									639	581	35	33	1	
Marquette	Richmond	370	205	165	370	205	165									86	90	119	75		

Mason	Branch	476	266	180	472	292	180	4	4	153	110	138	70	6
	Denton	183	119	64	183	119	64			70	37	49	27	
	Gerrish	251	193	58	251	193	58			94	44	99	14	
	Higgins	851	508	343	851	508	343			276	253	229	89	3
	Nester	891	353	38	891	353	38			107	31	246	7	
	Roscommon	161	104	57	161	104	57			66	44	38	12	1
	Keeler	1,106	559	547	1,104	558	546	2	1	504	504	55	42	1

^a Organized since census was taken.

Table 59 gives a list of the townships from which no returns of deaths were received for the year 1889. There were 21 of these townships. Of these five were not organized when the last census was made. The population for the remaining townships was 6,813. While there is a fine of one hundred dollars and costs of prosecution for every supervisor failing to make his returns, yet every year there are a number of such cases.

In table 60 the townships which reported that no deaths occurred within their borders during the year 1889 are given. Eleven of them have been organized since the last census, so that the population cannot be given. There were 44 townships reporting no deaths for the year. For 1888 there were 54 such reports.

The number of deaths occurring in some of these thinly settled townships would, from several apparent causes, be small, but it is hardly credible that there were no deaths in townships having nearly a thousand inhabitants.

TABLE 60.—*Counties and townships in which it was reported that no deaths occurred in 1889.*

Counties.	Townships, no deaths in 1889.	Population.			Counties.	Townships, no deaths in 1889.	Population.		
		Totals.	Males.	Females.			Totals.	Males.	Females.
Totals		8,619	4,790	3,829	Isabella	Bloomfield ..	419	238	181
Alger ^a	{ An Train				Marquette	{ Humboldt	511	282	229
	{ Bert					{ Turner ^a			
Arenac	{ An Gres	484	284	200	Missaukee	{ Bloomfield	189	112	77
	{ Moffitt	143	84	59		{ Forest	141	74	67
	{ Turner ^a				Ogemaw	{ Damon	260	138	122
Baraga	{ Arvon	308	200	108		{ Hill	30	20	10
	{ Spurr	266	167	99		{ Horton	228	135	98
Benzie	{ Colfax	179	91	88		{ Klacking	284	152	132
	{ Platt	214	113	101		{ Logan ^a			
Crawford	{ Ball	130	77	53		{ Mills	62	33	29
	{ Blaine ^a				Ontonagon	Interior ^a			
	{ Center Plains ..	351	188	163	Osceola	Cedar	229	117	112
Cheboygan	{ Burt	353	192	161	Oscoda	{ Atherton	220	115	105
	{ Forest ^a					{ Big Creek	143	82	61
	{ Greenwood	214	135	79		{ Greenwood	83	39	44
Clare	{ Hamilton ^a					{ Hannon	124	66	58
	{ Sheridan	497	263	234	Otsego	{ Bagley	643	338	305
	{ Summerfield ..	196	113	83		{ Dover	160	91	69
Houghton	{ Laird ^a				Wexford	{ Boon	165	94	71
Iosco	{ Alabaster	382	221	161		{ Colfax	550	285	265
	{ Reno ^a					{ Selma	419	225	194
	{ Thompson	42	26	16					

TABLE 61.—Exhibiting for the State and counties, by sex, the number of deaths returned in each month of the year 1889, and the number of deaths at each period of age.

State and counties.	Sex.	Year, 1889.	Months, 1889.												Ages in periods of years, 1889.																			
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and over.		
State	Totals.....	20,315	1409	1266	1676	1585	1454	1389	1677	2214	2025	1894	1712	1951	63	7684	914	508	711	940	857	770	687	623	633	612	670	822	908	918	801	963	254	
	Males.....	10,984	751	682	857	851	780	743	945	1190	1079	1068	996	1067	35	4106	468	252	334	481	447	365	394	338	335	391	395	454	557	529	467	557	179	
	Females...	9,297	656	582	815	733	673	641	726	1024	942	824	713	883	27	3524	446	256	377	459	410	405	353	290	298	251	275	368	351	389	334	406	105	
	Unknown...	34	2	2	4	1	1	5	6	---	---	---	4	2	3	3	1	34	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Alcona	Totals.....	19	1	1	1	2	---	1	2	8	3	2	1	2	---	7	2	1	---	3	---	2	1	---	---	---	---	1	2	---	---	---	---	---
	Males.....	9	1	1	1	1	---	1	---	---	---	1	2	1	---	1	2	---	2	---	2	---	---	---	---	---	---	1	1	---	---	---	---	---
	Females...	10	---	---	---	1	---	---	2	3	2	---	2	---	---	6	---	1	---	1	---	1	---	---	---	---	---	1	---	---	---	---	---	---
	Totals.....	5	---	---	---	---	---	---	---	1	3	---	---	1	---	3	---	1	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---
Alger	Males.....	2	---	---	---	---	---	---	---	---	2	---	---	---	---	1	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Females...	3	---	---	---	---	---	---	---	---	---	1	---	---	---	2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	Totals.....	359	40	29	35	96	21	22	28	34	29	31	28	30	2	114	7	5	17	18	15	7	13	9	10	17	11	25	29	19	17	25	1	
	Males.....	201	18	14	22	18	9	12	18	24	17	21	14	12	2	70	5	1	9	10	4	2	4	5	3	11	7	14	18	11	8	18	1	
Allegan	Females...	158	22	9	13	18	12	10	10	10	12	10	14	18	---	44	2	4	8	8	11	5	9	4	7	6	4	11	11	8	9	7	---	
	Totals.....	122	6	5	13	13	6	10	7	14	17	14	8	8	1	68	12	8	2	7	7	2	2	4	4	5	---	2	---	2	---	1	1	
	Males.....	67	4	4	6	7	5	7	3	5	13	2	7	4	---	41	6	1	1	2	3	1	---	---	3	2	3	---	1	---	2	---	1	
	Females...	55	2	1	7	6	1	3	4	9	4	12	1	4	1	27	6	2	1	5	4	1	2	1	2	2	---	1	---	---	---	---	---	
Alcona	Totals.....	75	5	5	6	2	3	5	5	11	10	9	3	11	---	37	2	3	1	5	2	2	2	3	3	1	4	2	3	8	2	---	---	
	Males.....	41	5	2	3	1	1	2	3	6	5	6	1	6	---	24	---	1	---	3	1	1	---	2	1	1	2	---	1	---	1	8	1	---
	Females...	34	---	3	3	1	2	3	2	5	5	3	2	5	---	13	2	2	1	2	1	1	2	1	2	2	2	2	2	2	2	---	1	

DEATHS, BY COUNTIES, BY SEX, BY MONTHS BY AGE.

Arenue.....	Totals.....	47	3	1	1	5	1	1	10	7	7	5	4	2	--	38	1	2	1	1	2	1	1	1	1
	Males.....	32	2	1	---	4	1	---	9	3	5	3	8	1	---	22	---	2	1	---	1	1	---	1	1
	Females.....	15	1	---	1	1	---	1	1	4	2	2	1	1	1	11	1	---	---	1	---	---	---	---	---
Barraga.....	Totals.....	35	8	1	---	---	3	2	5	9	3	5	2	2	---	12	2	1	8	---	1	2	1	1	5
	Males.....	19	---	---	---	---	2	1	3	5	1	3	2	2	4	4	1	1	1	---	1	2	---	5	
	Females.....	16	8	1	---	1	1	1	2	4	2	2	---	---	---	8	1	---	2	---	---	1	2	---	
Barry.....	Totals.....	177	1	14	18	21	11	8	15	18	17	24	16	14	---	54	8	3	4	15	4	5	6	5	
	Males.....	86	1	8	10	10	5	3	10	9	6	11	6	7	27	---	1	8	6	---	4	1	3	---	
	Females.....	91	---	6	8	11	6	5	5	9	11	13	10	7	---	27	8	2	1	9	4	1	5	2	
Hay.....	Totals.....	493	22	27	34	31	36	34	54	63	42	46	54	48	2	257	17	5	21	23	22	15	17	15	
	Males.....	251	12	15	14	16	20	16	28	27	21	25	32	24	1	134	9	2	6	5	9	8	10		
	Females.....	242	10	12	20	15	16	18	26	36	21	21	22	24	1	123	8	3	15	13	7	7	6		
Benzie.....	Totals.....	36	2	2	8	3	2	2	2	10	1	2	2	4	1	17	1	1	---	2	---	---	---	---	
	Males.....	18	1	---	1	2	2	1	---	5	---	2	1	3	---	6	---	---	---	1	---	1	---	---	
	Females.....	18	1	2	2	1	---	1	2	5	1	---	1	1	1	11	1	1	---	1	---	---	---	---	
Berrien.....	Totals.....	283	19	26	17	14	17	27	20	27	31	23	30	32	---	74	11	12	15	18	17	13	7	2	
	Males.....	148	15	13	10	5	7	20	11	14	14	13	11	15	---	41	5	7	6	5	10	6	4	1	
	Females.....	135	4	13	7	9	10	7	9	13	17	10	19	17	---	33	6	5	9	13	7	7	3	1	
Branch.....	Totals.....	272	21	21	21	32	13	14	27	21	29	31	21	20	1	57	7	4	6	12	10	12	6	7	
	Males.....	141	9	12	12	13	8	6	17	5	17	19	12	10	1	31	2	4	9	5	8	3	2	3	
	Females.....	131	12	9	9	19	5	8	10	16	12	12	9	10	---	26	5	---	3	7	7	9	4	4	
Calhoun.....	Totals.....	373	23	26	22	31	30	24	23	40	38	36	38	45	2	92	11	13	14	13	16	7	9	7	
	Males.....	188	12	17	7	17	18	10	16	21	13	19	16	22	---	49	6	5	8	6	5	4	3	2	
	Females.....	185	11	9	15	14	12	14	7	19	25	17	17	23	2	43	5	8	6	7	11	3	6	4	
Cass.....	Totals.....	175	13	13	15	14	18	12	16	16	19	15	10	1	39	2	4	5	6	4	5	6	6	2	
	Males.....	84	7	5	3	6	6	8	6	10	13	8	7	4	1	20	1	2	2	3	1	---	---	---	
	Females.....	91	6	8	10	9	8	10	6	6	8	11	8	6	---	19	1	2	3	3	3	5	6	4	

DEATHS, BY COUNTIES, BY MONTHS, BY SEX, BY AGE.

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Delta	Totals.....	135	9	12	6	7	13	14	10	24	21	18	9	16	1	90	9	2	7	8	6	6	4	4	2	4	2	3	3	2	1	2	
	Males.....	104	8	8	3	4	8	10	7	13	14	8	8	12	1	54	5	1	6	8	6	3	3	4	1	3	2	2	3	1	1	1	
	Females.....	49	1	3	3	3	5	4	3	11	7	5	1	3	--	34	4	1	1	--	--	3	1	--	1	1	--	1	--	--	--	--	
	Unknown.....	2	1	--	--	--	--	--	--	--	--	--	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
Eaton	Totals.....	271	17	21	18	26	35	30	13	31	24	27	12	26	1	69	3	9	12	7	18	11	5	9	9	13	12	21	15	19	17	16	6
	Males.....	131	8	6	12	15	15	10	7	15	11	12	6	13	1	34	--	6	4	3	5	3	2	6	1	6	8	11	11	9	9	7	6
	Females.....	140	9	15	6	11	20	10	6	16	13	15	6	13	--	35	3	3	8	4	13	8	3	8	7	4	10	4	10	8	9	--	--
	Totals.....	105	8	10	11	6	7	10	6	4	13	11	4	11	4	37	5	7	8	2	--	3	3	1	2	5	7	2	2	3	5	4	9
Emmet	Males.....	58	5	7	6	1	5	7	4	2	7	4	1	7	2	15	5	4	5	1	--	1	2	1	1	3	3	2	2	3	3	8	4
	Females.....	46	3	3	4	5	2	3	2	2	6	7	3	4	2	21	--	3	3	1	--	2	1	--	1	2	4	--	--	--	2	1	5
	Unknown.....	1	--	--	1	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Totals.....	327	22	26	21	31	21	15	26	24	41	24	32	42	2	63	10	10	8	17	15	9	12	11	11	8	9	11	27	26	39	36	5
Genesee	Males.....	167	7	12	9	17	8	7	14	10	21	17	20	23	2	36	7	7	4	10	4	3	5	4	5	3	6	6	14	11	22	18	2
	Females.....	160	15	14	12	14	13	8	12	14	20	7	12	19	--	27	3	3	4	7	11	6	7	7	6	5	3	5	13	15	17	18	3
	Totals.....	13	1	--	--	1	--	--	2	5	2	--	--	2	--	8	1	--	1	--	--	--	--	--	--	--	--	--	--	--	1	1	--
	Males.....	3	--	--	--	--	--	--	1	1	1	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
Gladwin	Females.....	10	--	1	--	--	--	--	2	4	1	--	--	1	--	8	--	1	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
	Totals.....	112	4	3	5	10	8	6	17	11	10	11	9	17	1	37	7	--	2	4	15	17	11	10	4	1	--	--	--	1	--	3	--
	Males.....	78	2	3	3	7	7	2	13	7	5	7	9	13	--	16	3	--	1	2	12	17	11	8	4	1	--	--	--	1	--	2	--
	Females.....	34	2	--	2	3	1	4	4	4	5	4	--	4	1	21	4	--	1	2	3	--	--	2	--	--	--	--	--	--	--	--	1
Gogebic	Totals.....	113	9	7	6	5	11	12	8	18	10	5	10	12	--	34	1	1	3	3	7	8	2	11	3	14	6	3	5	--	2	6	4
	Males.....	60	5	3	4	3	6	7	4	8	3	1	6	10	--	20	--	1	3	1	5	3	--	4	--	7	5	1	3	--	1	5	1
	Females.....	53	4	4	2	2	5	5	4	10	7	4	4	2	--	14	1	--	--	2	2	5	2	7	3	7	1	2	2	--	1	1	3
	Totals.....	188	7	8	17	12	15	6	24	28	32	13	13	12	1	74	4	3	10	7	8	8	6	5	4	8	6	4	5	9	14	10	3
Gratiot	Males.....	96	6	4	8	8	4	4	13	13	15	7	6	8	--	36	4	3	5	1	6	3	2	2	3	6	4	2	3	5	5	1	--
	Females.....	92	1	4	9	4	11	2	11	15	17	6	7	4	1	38	--	--	5	6	2	5	4	3	1	2	2	2	2	4	9	5	2

TABLE 61.—CONTINUED.—Deaths by counties, by sex, by months, and by age, 1889.

Counties.	Sex.	Year, 1889.	Months, 1889.												Ages in period of years, 1889.																		
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and over.	Unknown.
Hillsdale.....	Totals.....	218	9	21	17	13	16	10	18	21	23	26	26	18	38	3	5	6	12	11	6	8	6	12	12	8	17	15	19	9	26	5	
	Males.....	113	3	6	8	8	5	5	11	13	11	16	14	13	23	1	1	1	5	5	1	1	2	7	5	4	5	10	14	7	19	2	
	Females.....	105	6	15	9	5	11	5	7	8	12	10	12	5	15	2	4	5	7	6	5	7	4	5	7	4	12	5	5	2	7	3	
	Totals.....	395	33	15	35	32	21	23	47	45	47	25	27	45	233	17	10	10	21	13	11	12	7	14	9	6	8	10	3	5	4	2	
Houghton.....	Males.....	234	21	6	20	18	12	11	29	25	29	18	19	26	134	13	5	5	15	7	6	5	5	8	6	5	5	5	2	4	2	2	
	Females.....	160	12	9	15	14	9	12	17	20	18	7	8	19	98	4	5	5	6	6	5	7	2	6	3	1	3	5	1	1	2		
	Unknown.....	1							1						1																		
	Totals.....	234	14	16	15	18	13	18	14	25	31	27	18	25	103	17	9	8	13	9	9	13	5	6	4	9	5	5	5	7	2	5	
Huron.....	Males.....	130	9	10	6	8	8	11	7	16	18	15	7	15	53	10	6	4	9	4	3	6	2	3	4	8	2	3	5	2	2	4	
	Females.....	104	5	6	9	10	5	7	7	9	13	12	11	10	50	7	3	4	4	5	6	7	3	3		1	3	2		5		1	
	Totals.....	331	30	25	23	26	21	14	19	35	43	33	33	25	1	91	14	11	9	19	13	11	10	14	9	16	13	19	17	21	20	21	8
	Males.....	170	16	10	11	12	12	5	13	20	20	20	20	10	1	49	8	5	3	10	8	5	7	5	5	13	4	9	9	11	9	14	1
Ingham.....	Females.....	159	14	15	12	13	9	8	6	15	23	13	16	15	40	6	6	6	9	10	6	3	9	4	3	9	10	8	10	11	7	2	
	Unknown.....	2				1		1							2																		
	Totals.....	258	27	19	14	23	21	13	20	26	24	20	29	22	59	4	3	6	17	11	8	10	5	14	6	22	19	18	22	14	18	2	
	Males.....	132	17	16	6	7	10	9	11	10	10	12	15	9	33	2		4	6	4	3	3	3	5	4	14	13	8	10	10	9	1	
Ionia.....	Females.....	126	10	3	8	16	11	4	9	16	14	8	14	13	26	2	3	2	11	7	5	7	2	9	2	8	6	10	12	4	9	1	
	Totals.....	131	7	9	9	7	5	13	11	16	16	16	12	9	1	79	4	3	3	5	12	4	3	4	1	1	3		1		1	4	
	Males.....	73	2	6	5	4	4	5	6	7	8	11	5	9	1	43	1	1	2	3	7	3		2	4		1	2		1		3	
	Females.....	58	5	3	4	3	1	8	5	9	8	5	7		36	3	2	1	2	5	1	3	1									1	

DEATHS, BY COUNTIES, BY SEX, BY MONTHS, BY AGE.

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[illegible]

TABLE 61.—CONTINUED.—Deaths by counties, by sex, by months, and by age, 1889.

Counties.	Sex.	Year, 1889.	Months, 1889.												Ages in periods of years, 1889.																			
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and over.	Unknown.	
Leelanaw	Totals	93	2	4	6	7	5	6	8	14	13	15	5	8	43	8	6	1	5	3	6	2	2	2	1	1	4	1	7	3	6	15	80	Unknown.
	Males	54	2	2	3	5	2	2	4	8	8	8	4	6	27	2	5	1	1	1	1	1	1	1	1	1	1	1	5	2	3	75		
	Females	39	2	2	3	2	3	4	4	6	5	7	1	2	16	1	1	1	4	3	3	1	1	1	1	1	3	2	1	3	1	3		
Lenawee	Totals	432	28	18	46	39	38	35	42	45	32	35	33	40	1	89	11	8	13	23	19	16	11	19	15	15	18	26	38	32	35	42	2	
	Males	223	12	8	20	23	23	24	28	24	12	17	22	15	45	3	4	6	11	9	8	4	10	5	10	10	13	27	19	17	22	22		
	Females	209	16	10	26	16	15	11	19	21	20	18	11	25	1	44	8	4	7	12	10	8	7	9	10	5	8	13	11	18	18	20	2	
Livingston	Totals	203	14	15	16	19	14	19	16	18	13	26	15	18	41	8	6	8	7	11	6	5	4	8	4	10	16	13	19	14	18	5		
	Males	110	7	8	7	11	9	10	9	8	8	16	9	8	28	2	3	3	4	5	2	3	2	3	4	6	10	7	7	6	10	5		
	Females	93	7	7	9	8	5	9	7	10	5	10	6	10	13	6	3	5	3	6	4	2	2	5	4	6	6	12	8	8	8	8		
Luce	Totals	11	1	2	1	2	1	2	2	1	1	1	1	1	8	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
	Males	4	2	2	2	2	2	2	2	2	2	2	2	2	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
	Females	7	1	1	1	1	1	1	1	1	1	1	1	1	5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Macinac	Totals	54	1	3	2	4	7	5	1	9	3	7	4	4	25	1	1	4	2	7	3	1	1	1	1	2	1	1	1	1	1	1	3	
	Males	29	1	1	1	3	4	5	1	2	1	2	4	2	11	1	1	1	1	2	5	2	1	1	1	1	1	1	1	1	1	1	1	
	Females	25	2	2	2	1	3	1	1	7	2	5	1	2	14	1	3	1	3	2	1	1	1	1	1	1	1	1	1	1	1	1	2	
Macomb	Totals	387	16	26	25	35	27	27	26	48	42	26	41	28	108	12	6	16	21	16	13	9	10	16	12	19	22	16	22	28	21	21		
	Males	177	10	12	6	18	11	13	13	23	27	12	23	9	52	2	3	8	11	5	5	3	3	7	6	8	12	10	14	18	10	10		
	Females	190	6	14	19	17	16	14	13	25	15	14	18	19	56	10	3	8	10	11	8	6	7	9	6	11	10	6	8	10	11	11		

Manistee	Totals	212	8	9	19	16	15	23	22	13	24	24	20	19	108	15	6	7	7	9	6	7	8	9	3	7	3	7	6	4	3	
	Males	122	6	5	8	10	10	14	16	7	15	13	8	10	63	6	3	2	3	4	3	3	2	7	2	6	3	5	5	2	1	
	Females	90	2	4	11	6	5	9	6	6	9	11	12	9	45	9	3	5	4	5	3	4	1	2	1	1	2	1	2	1	1	
Manitou	Totals	8	1	2	2	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	Males	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	Females	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Marquette	Totals	429	21	27	28	38	26	35	38	68	47	89	30	37	214	25	8	17	31	31	17	18	12	13	10	9	3	5	5	7	14	
	Males	270	12	21	17	18	15	25	21	38	26	33	23	21	117	16	2	10	27	25	14	9	7	7	4	7	1	3	3	4	14	
	Females	159	9	6	11	15	11	10	17	30	21	6	7	16	97	9	1	7	4	6	3	4	5	6	6	2	2	2	2	3	3	
Mason	Totals	169	6	5	13	16	20	18	12	20	12	14	13	20	70	16	4	9	10	8	7	8	3	6	6	7	6	5	2	2	3	2
	Males	92	4	5	8	12	10	6	13	8	10	6	10	10	31	11	1	7	5	2	2	2	2	2	2	5	7	6	4	1	2	1
	Females	77	2	5	8	8	8	6	7	4	4	7	10	10	39	5	3	2	5	1	5	6	1	4	1	1	1	1	1	1	1	1
Meosta	Totals	145	8	3	11	15	16	7	9	16	22	17	11	10	51	7	4	4	7	7	12	7	2	3	5	6	8	4	7	6	4	1
	Males	86	5	1	7	9	12	5	4	5	13	11	5	9	29	5	3	2	4	6	8	6	1	4	4	6	3	2	3	2	3	3
	Females	59	3	2	4	6	4	2	5	11	9	6	6	1	22	2	1	2	3	1	4	1	2	2	1	2	2	4	4	4	1	1
Menominee	Totals	350	22	20	22	15	10	30	36	47	38	34	37	37	222	16	8	8	11	19	9	11	4	6	5	7	2	5	5	4	2	6
	Males	197	7	10	13	10	5	12	19	31	21	17	26	26	111	7	5	4	9	16	5	8	3	6	4	5	2	3	2	1	4	4
	Females	141	14	10	8	5	4	15	16	16	15	17	10	9	99	9	3	4	2	3	4	3	1	1	2	3	2	2	3	2	1	2
Midland	Unknown	12	1	1	1	1	1	1	1	1	1	1	1	1	2	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Totals	70	2	1	2	9	2	9	3	11	10	5	9	7	34	1	2	4	5	1	2	3	1	2	3	1	2	1	2	2	5	3
	Males	32	1	1	1	3	1	3	1	6	6	1	6	3	17	1	1	1	1	1	1	1	2	1	1	2	1	1	2	2	4	1
Missaukee	Females	38	1	1	1	6	1	6	2	5	4	4	3	4	17	1	1	3	4	1	1	1	1	1	2	2	1	1	2	1	2	2
	Totals	29	1	1	4	5	2	3	1	2	4	1	4	1	14	1	2	1	2	1	1	1	2	1	2	1	2	1	2	2	2	2
	Males	14	1	1	4	3	1	2	1	1	1	1	1	1	8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Monroe	Females	15	1	1	1	1	1	1	1	1	1	3	1	1	6	1	2	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1
	Totals	272	20	19	29	14	20	18	19	28	37	23	25	24	1	88	9	8	15	9	16	4	12	2	7	13	17	18	18	18	19	19
	Males	142	11	10	13	7	9	9	6	14	16	14	16	16	1	42	4	3	3	11	6	7	3	3	1	5	5	7	6	11	15	10
Females	130	9	9	16	7	11	4	13	14	21	9	9	8	41	5	6	5	4	3	9	1	9	1	2	8	10	7	7	3	9	9	

TABLE 61.—CONTINUED.—Deaths by counties, by sex, by months, and by age.

Counties.	Sex.	Year, 1889.	Months, 1889.												Ages in periods of years, 1889.																			
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and over.	Unknown.	
Montcalm	Totals	265	19	23	25	18	21	17	18	22	43	20	20	19	95	10	11	10	9	12	10	15	11	5	9	5	14	14	9	8	11	7		
	Males	129	9	13	12	7	15	6	12	11	21	9	6	8	46	4	7	4	5	5	2	5	6	2	5	3	10	8	4	3	5	5		
	Females	136	10	10	13	11	6	11	6	11	22	11	14	11	49	6	4	6	4	7	8	10	5	3	4	2	4	6	5	5	6	2		
Montmorency	Totals	25	1	1	3	4	3	3	2	2	2	1	2	1	17	2	2	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	
	Males	12	1	1	2	1	2	1	2	1	2	1	2	1	9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	Females	13			1	2	2	1	2	1	1	1			8																			
Muskegon	Totals	444	24	22	35	42	25	25	28	57	31	56	50	47	221	32	11	10	20	15	14	13	6	7	12	13	13	17	21	6	10	8		
	Males	254	15	14	18	26	13	14	17	35	20	33	25	23	136	12	4	4	14	7	6	8	4	4	7	8	12	10	2	7	2			
	Females	190	9	8	17	16	12	11	11	22	11	23	25	24	85	20	7	6	6	8	8	5	2	3	5	6	5	5	11	4	3	1		
Newaygo	Totals	116	8	4	10	8	11	10	8	14	12	8	12	11	45	3	4	10	9	3	1	5	2	4	2	2	6	2	4	3	4	7		
	Males	67	5	4	8	4	6	5	4	8	4	5	8	6	28	3	2	4	3	3	1	3	1	3	1	2	2	2	2	3	3	5		
	Females	49	3		2	4	5	5	4	6	8	3	4	5	17		2	6	6															
Oakland	Totals	397	32	28	33	46	31	20	24	34	44	39	27	38	180	2	7	11	17	15	20	13	13	18	15	17	24	35	34	34	39	3		
	Males	223	20	16	18	25	17	12	11	20	25	23	14	22	47	1	3	2	9	4	9	5	7	10	10	7	19	14	23	21	30	2		
	Females	173	12	12	15	21	14	8	13	14	19	16	13	16	32	1	4	9	8	11	11	8	6	8	5	10	5	21	11	13	9	1		
Oceana	Unknown.	1													1	1																		
	Totals	113	11	6	9	13	4	13	12	16	9	12	4	4	51			4	3	3	4	6	1	7	5	5	6	8	6	2	2	2		
	Males	60	4	5	3	9	2	7	4	7	6	8	2	3	23			2	1	1	1	3	1	3	5	4	3	6	4	1	2			
	Females	53	7	1	6	4	2	6	8	9	3	4	2	1	28			2	2	2	3	3		4		1	3	2	2	1				

Ogemaw.....	Totals.....	25	3	2	2	1	1	2	2	4	2	1	2	2	1	9	1	3	1	1	1	2	4	1	1	1
	Males.....	13	2	1	1	1	1	1	1	1	2	1	1	1	1	4	1	1	1	1	1	1	2	1	1	1
	Females.....	12	1	1	1	1	1	1	1	3	1	1	1	1	1	5	2	2	1	1	1	2	2	1	1	1
Ontonagon.....	Totals.....	34	2	1	5	1	3	1	5	6	6	2	2	2	15	5	5	5	5	5	5	1	1	1	1	3
	Males.....	21	2	3	1	2	1	4	3	4	1	1	1	1	9	5	5	5	5	5	1	1	1	1	1	
	Females.....	12	1	2	1	1	1	1	1	1	2	1	2	1	5	1	1	1	1	1	1	1	1	1	1	
Oscoda.....	Totals.....	93	11	5	5	9	5	4	10	15	2	7	9	10	1	34	1	4	3	4	4	6	6	5	2	1
	Males.....	49	7	2	2	4	4	4	1	9	1	4	6	5	17	1	3	2	1	1	3	2	3	1	1	
	Females.....	44	4	3	3	5	1	1	9	6	1	3	3	5	17	1	1	3	3	3	3	4	2	1	1	
Oscoda.....	Totals.....	18	3	1	1	1	1	1	1	4	2	4	3	1	2	1	1	1	1	1	3	1	2	2	1	1
	Males.....	13	3	1	1	1	1	1	1	1	2	3	2	1	1	1	1	1	1	1	3	1	1	2	1	
	Females.....	5	1	1	1	1	1	1	1	3	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	
Osego.....	Totals.....	19	1	2	2	1	3	3	3	4	3	4	3	3	9	1	1	3	3	3	1	1	1	1	1	1
	Males.....	8	1	1	1	1	1	2	2	2	2	2	2	2	5	1	1	2	2	2	1	1	1	1	1	
	Females.....	11	1	1	1	1	1	1	1	1	3	2	1	1	4	1	1	1	1	1	1	1	1	1	1	
Ottawa.....	Totals.....	375	23	24	29	28	37	28	26	49	44	33	23	26	5	133	27	13	13	12	17	11	11	12	8	13
	Males.....	212	12	15	11	17	20	17	17	31	24	20	13	12	8	71	16	8	8	6	8	6	3	5	8	10
	Females.....	160	11	9	18	11	17	11	6	18	20	13	10	14	2	59	11	5	10	6	9	5	5	7	3	3
Presque Isle.....	Totals.....	46	3	3	5	4	3	8	4	4	4	7	3	1	2	20	4	2	2	3	1	3	2	2	2	2
	Males.....	29	1	3	3	4	1	2	1	1	4	5	2	1	1	10	4	1	2	2	1	1	2	1	2	1
	Females.....	17	2	2	2	1	3	3	2	1	3	2	1	1	1	10	1	1	1	1	1	1	1	1	1	1
Rosecommon.....	Totals.....	7	1	1	1	1	1	1	1	1	1	1	1	1	3	3	2	1	1	1	1	1	1	1	1	1
	Males.....	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Females.....	4	1	1	1	1	1	1	1	1	1	1	1	1	2	3	1	1	1	1	1	1	1	1	1	1

TABLE 61.—CONTINUED.—Deaths by counties, by sex, and by age for 1889.

Counties.	Sex.	Year, 1889.	Months, 1889.												Ages in periods of years, 1889.																				
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and over.	Unknown.		
Saginaw	Totals	998	94	50	99	74	52	49	67	109	97	99	102	104	2	406	80	31	36	39	51	41	36	39	27	36	21	33	38	29	17	23	15		
	Males	560	47	26	59	41	31	25	28	69	53	59	62	58	2	233	40	13	21	21	30	25	18	17	17	23	11	18	25	16	10	10	11		
	Females	438	47	24	40	33	21	24	39	40	44	40	40	46		173	40	18	15	18	21	16	18	21	10	13	10	15	13	13	7	13	4		
Sanilac	Totals	264	16	23	24	25	19	15	14	31	30	27	21	17	2	100	12	5	12	16	15	12	11	4	6	6	5	5	11	9	10	16	9		
	Males	136	7	15	16	11	8	8	4	19	18	11	9	10		55	7	3	5	6	5	6	2	3	2	3	3	3	8	4	6	12	3		
	Females	128	9	8	8	14	11	7	10	12	12	16	12	7	2	45	5	2	7	10	10	6	9	1	4	3	2	2	3	5	4	4	6		
Schoolcraft	Totals	36	2	2	5		4	1	1	5	8	3	1	4		18	4	2	1	2		1	3	3		1	1								
	Males	23	1	2	2		3	1	1	4	5	2		2		10	4	2	1				3	2		1									
	Females	13	1		3		1				1	3	1	1	2		8			2				1			1								
Shiawassee	Totals	168	8	13	8	8	14	7	11	20	13	20	23	23		48	6	1	9	16	5	14	8	6	9	5	5	6	6	7	7	10			
	Males	87	3	6	5	4	5	4	6	8	9	13	10	14		24	3		5	7	3	4	5	3	3	2	3	5	2	4	7	7			
	Females	81	5	7	3	4	9	3	5	12	4	7	13	9		24	3	1	4	9	2	10	3	3	6	3	2	1	4	3		3			
St. Clair	Totals	450	28	29	24	34	36	38	33	57	49	40	38	42	2	168	16	11	23	22	27	19	20	18	10	7	18	15	9	15	19	25	8		
	Males	235	14	17	12	19	18	24	14	36	23	21	18	18	1	96	6	7	10	11	16	6	7	8	4	4	7	9	7	7	12	13	5		
	Females	215	14	12	12	15	18	14	19	21	26	19	20	24	1	72	10	4	13	11	11	13	10	6	3	11	6	2	8	7	12	3			
St. Joseph	Totals	239	20	8	27	22	18	15	16	18	22	26	21	26		43	7	4	6	8	10	9	9	4	4	16	13	23	18	24	16	25			
	Males	123	11	6	13	13	10	7	8	11	11	10	11	12		23	2	2	2	4	3	3	3	2	1	7	9	14	9	15	10	14			
	Females	115	9	2	13	9	8	8	8	7	11	16	10	14		19	5	2	4	4	7	6	6	2	3	9	4	9	9	9	6	11			
Tuscola	Unknown	1														1																			
	Totals	281	27	30	29	19	19	22	23	32	27	22	15	36		105	12	11	10	13	4	16	11	10	9	9	9	7	13	16	8	14	4		
	Males	159	9	11	19	12	11	12	15	16	19	9	11	15		65	8	5	4	4			4	4	6	4	6	4	7	7	14	4	10	3	
	Females	122	18	9	10	7	8	10	8	16	8	13	4	11		40	4	6	6	9	4	12	7	4	5	3	5		6	2	4	4	1		

VITAL STATISTICS OF MICHIGAN, 1889.

COLOR OF DECEDENTS IN MICHIGAN IN 1889.

In Table 62 are given the deaths of 1889 by color, with certain percentages and comparisons. The last column shows the death-rate for the different classes. It is found to be the greatest for the females of the black race, while for 1888 it was the highest for the black males. The death-rate for the whites is the same as the average for all colors, and, as usual, that for the mulattoes is the lowest of any in the table.

TABLE 62.—Deaths returned for the year 1889, distinguishing the color by number and proportion of each sex, and by sex, the per cent of decedents of each color to total of all colors, and the per cent of decedents to inhabitants.

Color.	Sex.	Population, June 1, 1884.	Number of deaths returned.	Per cent of deaths of each sex to total of both sexes.	Males to 100 fe- males.	Per cent of deaths of each color to total of all colors, by sex.	Per cent of inhabit- ants of each color to total of all col- ors, by sex, June 1, 1884.	Death-rate. Per cent of deaths in 1889 to population in 1884.
All colors.....	Totals.....	^a 1,846,845	20,315	-----	-----	100.00	100.00	1.10
	Males.....	970,352	10,984	54.16	118	100.00	100.00	1.13
	Females.....	876,287	9,297	45.84	-----	100.00	100.00	1.06
	Unknown.....	206	34	-----	-----	-----	-----	-----
White.....	Totals.....	1,823,846	19,982	-----	-----	98.36	98.75	1.10
	Males.....	958,409	10,803	54.15	118	98.35	98.77	1.13
	Females.....	865,427	9,146	45.85	-----	98.38	98.76	1.06
	Unknown.....	10	33	-----	-----	-----	-----	-----
Black.....	Totals.....	6,855	163	-----	-----	.80	.37	2.88
	Males.....	3,691	87	53.37	114	.79	.38	2.35
	Females.....	3,164	76	46.63	-----	.82	.36	2.40
Mulatto.....	Totals.....	8,260	42	-----	-----	.21	.45	.51
	Males.....	4,204	25	59.52	147	.23	.43	.59
	Females.....	4,056	17	40.48	-----	.18	.46	.42
Indian.....	Totals.....	6,782	124	-----	-----	.61	.37	1.83
	Males.....	3,508	68	54.84	121	.62	.35	1.94
	Females.....	3,274	56	45.16	-----	.60	.37	1.71
Unknown.....	Totals.....	1,032	4	-----	-----	.02	.05	.39
	Males.....	470	1	33.33	100	.01	.05	.21
	Females.....	366	2	66.67	-----	.02	.05	.55
	Unknown.....	196	1	-----	-----	-----	-----	-----
Black and mulatto.....	Totals.....	15,115	205	-----	-----	1.01	.81	1.36
	Males.....	7,895	112	54.63	120	1.02	.81	1.42
	Females.....	7,220	93	45.37	-----	1.00	.82	1.29

^a Includes 70 Asiatic males.

TABLE 63.—CONTINUED.—Deaths by counties, by color, by sex.

Counties.	All colors, 1889.				White.				Black.			Mulatto.			Indian.			Unknown.		
	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.	Totals.	Males.	Females.
Ingham.....	331	170	159	2	320	164	155	1	9	6	3							2	1	1
Ionia.....	258	132	126		257	131	126		1	1										
Iosco.....	131	73	58		131	73	58													
Iron.....	18	13	5		18	13	5													
Isabella.....	143	74	69		130	67	63					1	1		12	6	6			
Isle Royal.....																				
Jackson.....	439	224	215		429	218	211		8	4	4	2	2							
Kalamazoo.....	431	234	197		421	228	193		10	6	4									
Kalkaska.....	50	33	17		50	33	17													
Kent.....	1,128	627	499	2	1,119	622	495	2	9	5	4									
Keweenaw.....	48	37	11		48	37	11													
Lake.....	39	25	14		39	25	14													
Lapeer.....	229	122	107		229	122	107													
Leelanaw.....	93	54	39		78	44	34		1	1					14	9	5			
Lenawee.....	432	223	209		427	221	206		3	1	2	2	1	1						
Livingston.....	203	110	93		202	109	93		1	1										
Luce.....	11	4	7		11	4	7													
Mackinac.....	54	29	25		36	22	14								18	7	11			
Macomb.....	367	177	190		367	177	190													
Manistee.....	212	122	90		212	122	90													
Manitou.....	8	4	4		8	4	4													
Marquette.....	429	270	159		429	270	159													
Mason.....	169	92	77		164	87	77								5	5				
Mecosta.....	145	86	59		143	85	58		1	1		1	1							
Menominee.....	350	197	141	12	345	196	137	12							5	1	4			
Midland.....	70	32	38		70	32	38													
Missaukee.....	29	14	15		29	14	15													
Monroe.....	272	142	130		269	139	130		2	2		1	1							
Montcalm.....	265	129	136		265	129	136													
Montmorency.....	25	12	13		25	12	13													
Muskegon.....	444	254	190		440	251	189		2	1	1	2	2							
Newaygo.....	116	67	49		116	67	49													
Oakland.....	397	223	173	1	391	219	171	1	3	2	1	3	2	1						
Oceana.....	113	60	53		110	58	52								3	2	1			
Ogemaw.....	25	13	12		25	13	12													
Ontonagon.....	34	21	12	1	32	20	11	1							2	1	1			
Osceola.....	93	49	44		90	48	42								3	1	2			

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[illegible]

DEATHS OF NATIVE AND FOREIGN BORN INHABITANTS.

The nativity of decedents in the State for 1887 and 1889 inclusive and a ten years average ending with 1888 may be seen in Table 64. The death rate of the native born for 1889 is lower than for any year of the table, including the ten years average, while the death rate for the foreign born is just the opposite.

TABLE 64.—*Nativity of decedents in Michigan for the years 1887-1889, and the average for ten years, 1879-1888.*

Nativity of decedents.	Deaths, 1887.		Deaths, 1888.		Deaths, 1889.		Average for 10 years, ending with 1888.	
	Number.	Per cent of total.	Number.	Per cent of total.	Number.	Per cent of total.	Number.	Per cent of total.
All nativities.....	19,482	100.00	21,764	100.00	20,315	100.00	17,721	100.00
Native born.....	14,556	74.72	16,328	75.02	15,171	74.68	13,722	77.48
Foreign born.....	4,187	21.49	4,501	20.68	4,405	21.68	3,444	19.44
Unknown.....	739	3.79	935	4.30	739	3.64	555	3.13

Table 65 shows the population in 1884, the deaths in 1889 by nativity, sex, periods of age, and the death rate or number of deaths to each hundred of population. As usual, the death rate is seen to be greater for the native born than for the foreign born and also greater than the total for all nativities. This excess among the native born is more noticeable in the period under five than in any other, but in the more advanced ages the death rate is seen to be more nearly equal, and is often greater among the foreign born. It seems scarcely necessary to repeat the observation that native born decedents contain a large element of strictly foreign people, and also that a very large proportion of the deaths of infants and children is included among the native born.

TABLE 66.—*Exhibiting by number and by sex, for the State and counties, the nativity of decedents returned for the year 1889.*

State and counties.	All nativities, 1889.				Native.				Foreign.				Unknown.			
	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.
State	20,315	10,984	9,297	34	15,171	7,924	7,215	32	4,405	2,625	1,779	1	799	435	303	1
Alcona.....	19	9	10	---	13	6	7	---	6	3	3	---	---	---	---	---
Alger.....	5	2	3	---	4	1	3	---	1	1	---	---	---	---	---	---
Allegan.....	359	201	158	---	294	160	134	---	52	31	21	---	13	10	3	---
Alpena.....	122	67	55	---	95	54	41	---	19	12	7	---	8	1	7	---
Antrim.....	75	41	34	---	60	34	26	---	15	7	8	---	---	---	---	---
Arenac.....	47	32	15	---	41	29	12	---	6	3	3	---	---	---	---	---
Baraga.....	35	19	16	---	21	10	11	---	11	7	4	---	3	2	1	---
Barry.....	177	86	91	---	157	76	81	---	17	7	10	---	3	3	---	---
Bay.....	493	251	242	---	360	176	184	---	129	73	56	---	4	2	2	---
Benzie.....	36	18	18	---	31	16	15	---	4	2	2	---	1	---	1	---
Berrien.....	283	148	135	---	237	120	117	---	39	25	14	---	7	3	4	---
Branch.....	272	141	131	---	218	107	111	---	31	18	13	---	23	16	7	---
Calhoun.....	373	188	185	---	320	156	164	---	46	29	17	---	7	3	4	---
Cass.....	175	84	91	---	152	70	82	---	18	14	4	---	5	---	5	---
Charlevoix.....	40	16	24	---	37	16	21	---	3	---	3	---	---	---	---	---
Cheboygan.....	107	57	50	---	86	40	46	---	21	17	4	---	---	---	---	---
Chippewa.....	75	41	34	---	46	23	23	---	28	18	10	---	1	---	1	---
Clare.....	24	17	7	---	20	15	5	---	4	2	2	---	---	---	---	---
Clinton.....	236	134	102	---	198	107	91	---	38	27	11	---	---	---	---	---
Crawford.....	22	10	12	---	19	8	11	---	3	2	1	---	---	---	---	---
Delta.....	155	104	49	2	108	64	42	2	43	36	7	---	4	4	---	---
Eaton.....	271	131	140	---	240	118	122	---	22	10	12	---	9	3	6	---
Emmet.....	105	58	46	1	84	50	33	1	15	7	8	---	6	1	5	---
Genesee.....	327	167	160	---	253	130	123	---	62	32	30	---	12	5	7	---
Gladwin.....	13	3	10	---	13	3	10	---	---	---	---	---	---	---	---	---
Gogebic.....	112	78	34	---	48	23	25	---	51	48	3	---	13	7	6	---
Grand Traverse.....	113	60	53	---	81	44	37	---	31	16	15	---	1	---	1	---
Gratiot.....	188	96	92	---	175	90	85	---	11	5	6	---	2	1	1	---
Hillsdale.....	218	113	105	---	193	99	94	---	15	9	6	---	10	5	5	---
Houghton.....	395	234	160	1	282	160	121	1	104	69	35	---	9	5	4	---
Huron.....	284	130	104	---	156	85	17	---	77	44	33	---	1	1	---	---

TABLE 66.—CONTINUED.—*Deaths by counties, by nativity, by sex.*

Counties.	All nativities, 1889.				Native.				Foreign.				Unknown.			
	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.
Ingham.....	331	170	159	2	291	148	141	2	32	18	14		8	4	4	
Ionia.....	258	132	126		201	97	104		47	29	18		10	6	4	
Iosco.....	131	73	58		86	44	42		40	25	15		5	4	1	
Iron.....	18	13	5		14	11	3		4	2	2					
Isabella.....	143	74	60		111	54	57		29	18	11		3	2	1	
Isle Royal.....																
Jackson.....	439	224	215		360	172	188		62	39	23		17	13	4	
Kalamazoo.....	431	234	197		351	189	162		67	37	30		13	8	5	
Kalkaska.....	50	33	17		40	27	13		7	4	3		3	2	1	
Kent.....	1,128	627	499	2	806	424	381	1	233	129	103	1	89	74	15	
Keweenaw.....	48	37	11		29	21	8		19	16	3					
Lake.....	39	25	14		29	18	11		7	5	2		3	2	1	
Lapeer.....	229	122	107		169	91	78		55	29	26		5	2	3	
Leelanaw.....	93	54	39		76	43	33		16	11	5		1		1	
Lenawee.....	432	223	209		352	175	177		73	47	26		7	1	6	
Livingston.....	203	110	93		167	90	77		27	15	12		9	5	4	
Luce.....	11	4	7		11	4	7									
Mackinac.....	54	29	25		45	23	22		5	4	1		4	2	2	
Macomb.....	367	177	190		276	127	149		88	49	39		3	1	2	
Manistee.....	212	122	90		146	79	67		64	43	21		2		2	
Manitou.....	8	4	4		3	1	2		5	3	2					
Marquette.....	429	270	159		264	150	114		155	112	43		10	8	2	
Mason.....	169	92	77		126	66	60		41	26	15		2		2	
Mecosta.....	145	86	59		108	62	46		33	21	12		4	3	1	
Menominee.....	350	197	141	12	265	136	117	12	83	60	23		2	1	1	
Midland.....	70	32	38		60	28	32		9	4	5		1		1	
Missaukee.....	29	14	15		21	10	11		7	4	3		1		1	
Monroe.....	272	142	130		200	98	102		57	31	26		15	13	2	
Montcalm.....	265	129	136		218	104	114		35	19	16		12	6	6	
Montmorency.....	25	12	13		21	10	11		1	1			3	1	2	
Muskegon.....	444	254	190		333	195	138		105	54	51		6	5	1	
Newaygo.....	116	67	49		99	54	45		15	12	3		2	1	1	
Oakland.....	397	223	173	1	296	162	133	1	90	56	34		11	5	6	
Oceana.....	113	60	53		90	46	44		16	10	6		7	4	3	
Ogemaw.....	25	13	12		19	9	10		6	4	2					
Ontonagon.....	34	21	12	1	26	16	9	1	4	1	3		4	4		
Osceola.....	93	49	44		65	35	30		25	11	14		3	3		

TABLE 66.—CONTINUED.—*Deaths by counties, by nativity, by sex.*

Counties.	All nativities, 1889.				Native.				Foreign.				Unknown.			
	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.	Totals.	Males.	Females.	Unknown.
Oscoda.....	18	13	5	---	11	6	5	---	3	3	---	---	4	4	---	---
Otsego.....	19	8	11	---	14	7	7	---	5	1	4	---	---	---	---	---
Ottawa.....	375	212	160	3	258	144	111	3	111	64	47	---	6	4	2	---
Presque Isle.....	46	29	17	---	28	17	11	---	15	9	6	---	3	3	---	---
Roscommon.....	7	3	4	---	6	2	4	---	1	1	---	---	---	---	---	---
Saginaw.....	998	560	438	---	703	386	317	---	249	140	109	---	46	34	12	---
Sanilac.....	264	136	128	---	162	84	78	---	94	49	45	---	8	3	5	---
Schoolcraft.....	36	23	13	---	26	14	12	---	9	8	1	---	1	1	---	---
Shiawassee.....	168	87	81	---	137	70	67	---	29	16	13	---	2	1	1	---
St. Clair.....	450	235	215	---	309	160	149	---	121	66	55	---	20	9	11	---
St. Joseph.....	239	123	115	1	196	104	91	1	28	14	14	---	15	5	10	---
Tuscola.....	281	159	122	---	197	114	83	---	59	29	30	---	25	16	9	---
Van Buren.....	281	135	146	---	244	116	128	---	29	13	16	---	8	6	2	---
Washtenaw.....	344	185	159	---	239	130	109	---	73	39	34	---	32	16	16	---
Wayne.....	4,005	2,153	1,844	8	2,768	1,435	1,326	7	1,078	639	439	---	159	79	79	1
Wexford.....	97	39	38	---	57	26	21	---	17	11	6	---	3	2	1	---

CAUSES OF DEATH, 1889.

This is in many respects the most important part of the report, its object being to point out the locality in the State where certain diseases prevailed the most, what were the diseases that proved most fatal, at what ages they bore most heavily, at what seasons of the year they occurred, what were the surrounding circumstances, and how they compare with deaths in previous years. All these facts form an array of evidence from which reliable conclusions can be drawn for the benefit of the public health.

While the leading causes of death in Michigan are not absolutely peculiar to its own special area, there are certain diseases, more prominent than others that demand our most thoughtful consideration. These principal causes will now be taken up, classified and studied with reference to their effect upon the mortality rate in the State.

In Table 67 the causes of death are arranged in five classes. The number of deaths from zymotic diseases in 1889 is found to be less than for 1888, though more in proportion to the total number of deaths returned, but the proportion in 1888 was lower than for any year since 1885. The number of deaths in 1889 in this class corresponds with the average for ten years, though the per cent to the total deaths is less.

The number of deaths in the second class called constitutional, and which includes consumption and cancer, is lower than for any year in the table, both as to number returned, and per cent of total deaths. Class three, local diseases, affecting different organs of the body as the brain and nervous system, shows a less number than was returned for 1888, and more than for 1887.

The deaths from developmental diseases, of old age and infants, and the number of deaths by violence for the several years can also be found in this table.

TABLE 67.—*Number of deaths returned from all causes, from each class of causes and the per cent of deaths from each class, to deaths from all causes, for the years 1887-1889, and the average for ten years, 1879-1888.*

Causes of deaths.—Classes.	1887.		1888.		1889.		Average for 10 years, 1878-1887.	
	Number	Per cent of total.	Number	Per cent of total.	Number	Per cent of total.	Number	Per cent of total.
All causes.....	19,482	100.00	21,764	100.00	20,315	100.00	17,721	100.00
I.—Zymotic diseases.....	4,573	25.01	4,994	22.95	4,772	23.49	4,771	26.92
II.—Constitutional diseases.....	3,065	15.84	3,527	16.20	3,123	15.37	2,861	16.14
III.—Local diseases.....	6,034	30.97	6,956	31.96	6,459	31.79	5,219	29.45
IV.—Developmental diseases.....	3,125	16.04	3,950	18.15	3,549	17.47	2,605	14.71
V.—Violent deaths.....	1,044	5.36	1,083	4.75	1,096	5.40	906	5.11
Unknown and unclassified.....	1,321	6.75	1,304	5.99	1,316	6.48	1,359	7.67

TABLE 68.—*By months, the number of deaths returned in Michigan from all causes and from each class of causes during the year 1889.*

Causes of death.—Classes.	Year, 1889.	Months of death, 1889.												
		Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
All causes.....	20,315	1411	1265	1667	1577	1460	1394	1683	2215	2028	1893	1700	1957	63
I.—Zymotic diseases.....	4,772	256	230	293	244	226	258	444	720	664	537	433	459	13
II.—Constitutional diseases.....	3,123	244	204	273	277	251	251	223	308	294	255	248	285	10
III.—Local diseases.....	6,459	514	486	606	596	527	439	463	589	535	569	528	602	5
IV.—Developmental diseases.....	3,549	249	221	319	298	268	264	303	335	314	314	294	355	15
V.—Violent deaths.....	1,096	63	50	76	70	86	81	118	107	83	108	105	147	7
Unknown and unclassified.....	1,314	85	84	100	92	102	101	137	156	138	110	87	109	13

The most important of the zymotic diseases for the year 1889 and for every year since 1878 with the number of deaths in each year, for each disease, are given in Table 69. A glance at the table will show the proportion.

TABLE 69.—*Deaths in Michigan from some of the prominent zymotic diseases during the twelve years 1877-1889, and the average.*

Years.	Diseases.						
	Typhoid fever.	Whooping cough.	Croup.	Diphtheria.	Measles.	Scarlet fever.	Small-pox.
1878.....	329	132	236	887	16	429	6
1879.....	397	162	278	1,473	167	418	6
1880.....	513	264	322	1,542	125	370	3
1881.....	584	142	380	2,063	256	383	82
1882.....	463	86	349	1,416	150	592	100
1883.....	439	92	336	1,007	258	673	5
1884.....	514	160	325	1,065	144	326	3
1885.....	387	138	337	1,054	38	245	3
1886.....	498	185	400	1,117	129	319	6
1887.....	770	110	399	935	285	318	---
1888.....	638	174	474	717	414	323	3
1889.....	637	140	357	848	104	240	2
Average.....	539	149	349	1,177	174	336	18

Table 70 presents several of the local diseases and the number of deaths caused by them for the last twelve years. Heart disease and Bright's disease of the kidneys have steadily increased in number, while the others have changed from year to year. In tables 71, 72 and 73 the deaths from certain specified diseases for several years may be seen.

TABLE 70.—Deaths in Michigan from some of the principal local diseases returned for the twelve years 1878-1889, and the average.

Years.	Diseases.					
	Convulsions.	Heart disease.	Bronchitis.	Pleurisy.	Peritonitis.	Bright's disease.
1878.....	288	368	46	16	11	32
1879.....	275	451	53	20	16	3
1880.....	348	482	50	26	12	80
1881.....	337	518	76	19	20	89
1882.....	356	562	106	16	21	138
1883.....	344	684	89	20	16	187
1884.....	436	718	98	18	27	179
1885.....	452	790	113	16	22	198
1886.....	431	725	97	20	32	21
1887.....	474	847	125	25	35	205
1888.....	516	961	199	46	46	210
1889.....	453	976	114	25	50	229
Average.....	392	668	97	22	26	149

TABLE 71.—Deaths in Michigan from chief developmental diseases, returned for the twelve years 1878-1889, and the average.

Years.	Diseases.					
	Teething.	Still born infantile premature	Child- birth.	Abortion.	Puerperal convul- sions.	Old age.
1878.....	60	858	161	7	3	579
1879.....	40	787	193	12	5	608
1880.....	49	808	193	6	2	625
1881.....	84	761	192	8	-----	725
1882.....	83	890	199	9	3	647
1883.....	55	1,034	221	12	4	726
1884.....	57	1,462	222	6	4	795
1885.....	49	1,612	217	12	1	773
1886.....	75	1,542	213	7	2	865
1887.....	81	1,607	223	11	1	917
1888.....	89	2,070	243	5	1	1,174
1889.....	82	1,876	242	8	3	965
Average	67	1,276	210	9	3	788

TABLE 72.—Deaths in Michigan from some of the prominent violent causes returned for the twelve years, 1878-1879.

Years.	Burns and scalds.	Poison.	Railroad accident.	Drowning.	Freezing.	Homicide.	Suicide.	Totals.
1878.....	66	27	46	117	2	11	63	332
1879.....	64	15	40	122	5	15	59	320
1880.....	64	22	40	179	3	7	65	360
1881.....	175	25	75	125	2	15	57	474
1882.....	57	22	58	114	3	11	62	353
1883.....	65	33	109	158	-----	15	91	471
1884.....	69	16	73	150	1	24	104	437
1885.....	67	26	76	132	6	28	91	426
1886.....	58	18	72	144	5	30	82	409
1887.....	49	31	90	163	1	29	105	468
1888.....	55	21	113	161	2	14	101	467
1889.....	93	28	110	130	7	32	94	494
Average	73	24	75	141	3	19	81	418

DEATHS FROM BRAIN DISORDERS.

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TABLE 73.—Deaths in Michigan, returned from brain disorders—twelve years.

Years.	Softening of the brain.	Apoplexy.	Paralysis.	Insanity.	Cephalitis and unspecified brain diseases.	Totals.
1876.....	25	91	241	11	370	738
1879.....	25	103	262	7	400	797
1880.....	27	119	278	8	475	907
1881.....	23	110	253	10	541	942
1882.....	36	87	357	8	448	936
1883.....	22	85	345	22	489	913
1884.....	40	130	397	17	524	1,108
1885.....	36	116	400	24	491	1,067
1886.....	30	158	435	25	492	1,190
1887.....	38	135	450	33	516	1,172
1888.....	37	144	553	25	583	1,342
1889.....	39	147	533	26	514	1,259
Average.....	31	119	380	18	483	1,031

DEATHS IN 1889, GROUPED IN PART OF BODY DISEASED.

Table 74 shows what per cent of the whole number of deaths were due to diseases of particular organs of the body for the years 1887, 1888 and 1889, and the average for the last ten years. As usual disease of the lungs stand first. For the year 1889 it comprises nearly one-fifth of the total number of deaths. A comparison of the diseases in the table will show the proportion of deaths from the causes specified.

TABLE 74.—Order of seven groups of causes of deaths returned for the years 1887–1889, inclusive, and the average for ten years, 1879–1888.

1887.			1888.			1889.			Average for 10 years, 1879–1888.		
Disease of	No.	Per cent to all causes.	Disease of	No.	Per cent to all causes.	Disease of	No.	Per cent to all causes.	Disease of	No.	Per cent to all causes.
All causes..	19,482	100.00	All causes..	21,764	100.00	All causes..	20,315	100.00	All causes..	17,721	100.00
Lungs.....	3,711	19.05	Lungs.....	4,345	19.96	Lungs.....	3,693	18.18	Lungs.....	3,475	19.61
Bowels.....	2,585	13.27	Bowels.....	2,533	11.87	Bowels.....	2,066	10.17	Bowels.....	2,246	12.67
Brain.....	2,274	11.67	Brain.....	2,303	11.00	Brain.....	1,938	9.79	Brain.....	2,001	11.29
Throat.....	1,377	7.07	Throat.....	1,245	5.72	Throat.....	1,404	6.91	Throat.....	1,533	8.65
Heart.....	992	5.09	Heart.....	1,004	5.08	Heart.....	1,065	5.24	Heart.....	777	4.38
Kidneys....	434	2.23	Kidneys....	451	2.07	Kidneys....	454	2.23	Kidneys....	320	1.80
Liver.....	155	.80	Liver.....	351	1.61	Liver.....	378	1.86	Liver.....	159	.90
7 groups....	11,523	59.17	7 groups....	12,402	57.26	7 groups....	11,043	54.33	7 groups....	10,511	59.30

TABLE 75.—*Eleven geographical divisions of the State, with a list of counties included in each division.*

Upper peninsula.	Northwestern.	Northern.	Northeastern.	Western.	Northern central.	Eastern.	Central.	Southwestern.	Southern central.	South-eastern.
Alger.	Benzie.	Antrim.	Alcona.	Kent.	Clare.	Arenac.	Barry.	Allegan.	Branch.	Macomb.
Baraga.	Gr'd Traverse.	Charlevoix.	Alpena.	Lake. ^f	Gladwin. ^d	Bay.	Clinton.	Berrien.	Calhoun.	Monroe.
Chippewa. ^b	Leelanaw.	Cheboygan.	Iosco.	Mason. ⁱ	Isabella.	Huron.	Eaton.	Cass.	Hillsdale.	Oakland.
Delta. ^c	Manistee.	Crawford.	Montmorency.	Muskegon.	Macosta.	Lapeer.	Genesee.	Van Buren. ^k	Jackson.	Wayne.
Gogebic.	Manitou.	Emmet.	Ogemaw.	Newaygo.	Midland.	Saginaw.	Gratiot.		Kalamazoo.	
Houghton.	Wexford.	Kalkaska.	Oscoda.	Oceana.	Missaukee.	Sanilac.	Ingham.		Lenawee. ^g	
Iron. ^e		Otsego.	Presque Isle.	Ottawa.	Oscola.	St. Clair.	Ionia.		St. Joseph.	
Isle Royal.					Roscommon. ^j	Tuscola.	Livingston.		Washtenaw.	
Keweenaw.							Moncalm.			
Luce.							Shiawassee.			
Mackinac.										
Marquette. ^h										
Menominee.										
Ontonagon.										
Schoolcraft.										

No returns of deaths from the following townships:

^b Detroit, Superior, Trout Lake and White Fish.^c Minnewaska.^d Billings, Buckeye and Sage.^e Felch and Mastodon.^f Eden and Glencoe.^g Rome.^h Richmond.ⁱ Branch.^j Denton, Gerrish, Higgins, Neeter and Roscommon.^k Keeler.

DEATHS 1889, BY CLASSES OF CAUSES, BY DIVISIONS OF THE STATE.

The death rate of the several general classes of disease for the different geographical sections of the State may be seen in Table 76.

As for 1888, the largest proportion was in the local diseases, and was highest for the central division. The zymotic diseases are highest in the northern sections, as are the violent deaths. The northern central shows the lowest death rate, as based upon the population of 1884. The table is an interesting one and will repay studying.

TABLE 76.—*Exhibiting, by geographical divisions, the number of deaths, the per cent of deaths in 1889 to population in 1884, the per cent of deaths for each division to total deaths for the State, and the per cent of deaths from each class of causes to deaths from all causes.*

State and geographical divisions.	Population June 1, 1884, repre- sented by deaths in 1889.	Deaths reported, 1889.		Per cent of all deaths in 1889 to population in 1884.	Per cent of deaths from each class of causes to deaths from all causes by geographical divisions.					
		Number.	Per cent of total.		Class I.—Zymotic dis- eases.	Class II.—Constitutional diseases.	Class III.—Local dis- eases.	Class IV.—Development- al diseases.	Class V.—Violent deaths.	Unknown and unclassi- fied.
State.....	1,846,845	20,315	100.00	1.10	23.44	15.37	31.30	17.47	5.40	6.47
Upper Peninsula.....	114,971	1,757	8.65	1.53	28.46	8.65	22.08	17.99	12.01	10.81
Northwestern.....	55,200	539	2.65	.98	25.60	11.69	30.43	16.14	4.63	11.50
Northern.....	46,714	418	2.06	.90	25.12	17.46	25.36	16.27	5.51	10.29
Northeastern.....	37,233	386	1.90	1.04	25.13	8.29	23.06	19.70	7.51	16.32
Western.....	212,035	2,384	11.74	1.12	26.64	14.93	30.29	16.49	4.87	6.80
Northern Central.....	70,313	524	2.58	.75	21.56	16.80	30.53	18.89	5.34	6.87
Eastern.....	291,713	2,996	14.75	1.03	24.47	14.55	29.77	19.16	4.94	7.11
Central.....	299,364	2,424	11.93	.81	21.62	17.99	39.40	15.64	4.83	4.50
Southwestern.....	126,879	1,098	5.40	.87	19.22	20.31	36.34	15.94	3.64	4.55
Southern Central.....	297,711	2,748	13.53	.92	18.05	18.23	34.93	16.88	4.84	3.49
Southeastern.....	294,712	5,041	24.81	1.71	24.20	15.14	32.15	18.25	4.43	5.75

TABLE 77.—CAUSES OF DEATH.—NOSOLOGICAL ARRANGEMENT.

Exhibiting the number of reported deaths in Michigan, and in each county of the State, during the year 1889, from specified causes, statistically classified (still births included).

Causes of death, 1889.		Counties, 1889.																										
	State.	Alcona.	Alger.	Allegan.	Alpena.	Antrim.	Arenac.	Baraga.	Barry.	Bay.	Benzie.	Berrien.	Branch.	Calhoun.	Cass.	Charlevoix.	Cheboygan.	Chippewa.	Clare.	Clinton.	Crawford.	Delta.	Eaton.	Emmet.	Genesee.	Gladwin.	Gogebic.	
All causes.....	20315	19	5	359	122	75	47	35	177	493	36	283	272	373	175	40	107	75	24	286	22	155	271	105	327	13	112	
Specified causes.....	19081	18	5	345	98	72	44	29	170	455	30	269	264	363	162	36	104	70	22	227	16	143	258	88	318	12	98	
Causes not specified.....	1234	1	1	14	24	3	3	6	7	38	6	14	8	10	13	4	3	5	2	9	6	12	13	17	9	1	14	
CLASSES.																												
I.—Zymotic diseases.....	4772	5	2	69	26	26	14	15	40	108	4	65	29	66	30	14	34	28	9	50	2	44	53	16	55	6	42	
II.—Constitutional diseases.....	3123	2	1	62	16	11	1	5	27	69	5	57	61	66	40	8	19	9	1	49	2	12	55	23	76	—	6	
III.—Local diseases.....	6459	5	—	136	26	24	8	4	68	133	14	91	109	156	62	11	26	23	6	83	6	32	104	25	113	3	20	
IV.—Developmental diseases.....	3549	3	1	62	25	7	15	3	29	124	4	45	52	57	25	1	23	7	5	31	5	37	38	16	62	3	10	
V.—Violent deaths.....	1066	3	1	16	3	4	6	2	5	21	2	11	12	18	5	2	2	1	1	13	1	18	7	6	12	—	20	
Unclassified.....	80	—	—	—	—	—	—	—	1	—	1	—	1	—	—	—	—	2	—	1	—	—	1	—	—	—	—	
ORDERS.																												
I.—1. Miasmatic diseases.....	4733	5	2	69	26	26	14	15	40	108	4	64	29	66	30	14	34	27	9	50	2	44	52	16	55	6	41	
2. Enthetic diseases.....	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
3. Dietic diseases.....	21	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
4. Parasitic diseases.....	13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1	—	—	—	—	
II.—1. Diathetic diseases.....	879	1	1	18	3	6	—	1	6	21	1	15	22	24	16	1	6	2	1	20	—	—	—	—	—	—	—	—
2. Tubercular diseases.....	2244	1	—	44	13	5	1	4	21	48	4	42	39	42	24	7	13	7	—	29	2	12	36	19	51	—	6	

III.—1. Diseases of nervous system.....	2183	1	51	11	9	3	1	21	38	3	32	28	45	23	3	11	9	4	29	6	8	36	7	39	1	3	
2. Diseases of organs of circulation.....	1147	1	22	4	3	1	18	18	2	20	20	33	13	5	3	4	18	4	29	5	20	1	1	1	1	1	
3. Diseases of respiratory organs.....	1576	2	32	10	7	1	2	13	37	5	15	22	35	9	1	5	9	1	12	12	14	6	22	1	14		
4. Diseases of digestive organs.....	926	---	22	1	4	3	1	9	28	2	5	16	16	8	1	5	1	9	5	14	6	16	1	---	---		
5. Diseases of urinary organs.....	464	1	8	---	1	---	---	4	8	2	15	19	20	5	1	2	---	10	2	8	1	15	---	---	---		
6. Diseases of generative organs.....	22	---	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---		
7. Diseases of organs of locomotion.....	10	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---		
8. Diseases of integumentary system.....	131	---	1	---	---	---	---	3	4	---	4	3	7	4	---	---	---	1	3	---	1	3	---	1	---		
IV.—1. Developmental diseases of children.....	1978	2	30	23	5	6	2	17	64	4	21	27	22	9	---	16	6	5	11	4	30	23	8	22	2	9	
2. Developmental diseases of women.....	263	1	7	2	1	1	1	1	14	---	2	6	2	2	1	1	---	---	1	---	2	2	2	3	---	---	
3. Developmental diseases of old people.....	965	---	22	---	1	1	---	9	20	---	22	18	26	11	---	1	1	18	2	13	5	34	1	1	1		
4. Diseases of nutrition.....	343	1	3	---	---	7	---	2	26	---	---	1	7	3	---	5	---	1	1	3	---	1	3	---	---		
V.—1. Accident or negligence.....	554	2	1	12	1	2	3	2	1	13	---	7	5	9	2	2	1	---	4	---	15	2	5	8	---	5	
2. Battle.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
3. Homicide.....	32	---	---	---	---	---	---	---	---	1	---	1	1	---	---	---	---	---	---	---	---	---	1	---	4		
4. Suicide.....	94	---	---	---	---	---	---	---	2	---	2	---	---	1	---	---	---	3	---	---	2	---	1	---	1		
5. Execution.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
6. Violent deaths.....	416	1	4	2	2	3	---	4	6	1	2	6	8	2	---	---	---	1	6	1	3	3	1	2	---		
CLASS I.—ZYMOTIC.....	4772	5	2	69	26	26	14	15	40	108	4	65	29	66	30	14	34	28	9	50	2	44	53	16	55	6	42
I.—Order 1, Miasmatic.....	4738	5	2	69	26	26	14	15	40	108	4	64	29	66	30	14	34	27	9	50	2	44	52	16	55	6	41
1. Small-pox.....	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
2. Measles.....	104	---	2	---	---	---	---	4	---	---	---	---	2	---	---	---	1	1	2	1	---	1	---	---	2		
3. Scarletina.....	240	1	2	1	2	---	---	2	13	---	2	---	2	1	---	3	---	1	8	---	3	---	3	---	1		
4. Diphtheria.....	848	---	12	---	2	6	---	6	2	---	16	3	17	3	4	4	7	---	2	---	4	2	1	7	3		
5. Quinsy.....	13	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
6. Croup.....	408	1	4	2	---	---	---	---	10	1	5	---	---	1	---	7	2	---	3	---	5	1	3	1	---		

TABLE 77.—CONTINUED.—Causes of death, classified.

Causes of death, 1889.		Counties, 1889.																									
		State.	Alcona.	Alger.	Allagan.	Alpena.	Antrim.	Arenac.	Baraga.	Barry.	Benzie.	Berrien.	Branch.	Calhoun.	Cass.	Charlevoix.	Cheboygan.	Chippewa.	Clare.	Clinton.	Crawford.	Delta.	Eaton.	Emmet.	Genesee.	Gladwin.	Gogebic.
3.	Phthisis (consumption of lungs).....	2173	1		42	13	5	1	4	21	48	4	40	39	40	23	7	13	7		35	2	12	34	18	50	6
4.	Hydrocephalus.....	7																						1			
5.	Marasmus.....	16																									
CLASS III.—LOCAL DISEASES.....		6459	5		136	26	24	8	4	68	138	14	91	109	156	62	11	26	23	6	83	6	32	104	25	113	3
III.—ORDER 1, Nervous system.....		2183	1		51	11	9	3	1	21	38	3	32	28	45	23	8	11	9	4	29	6	8	36	7	39	1
1.	Cephalitis.....	341			7	3		1		13		7		1	3		2	1		3	4	5	2	2	5		
2.	Apoplexy.....	147			7				2	1		2	6	2	1					4			7	1	3		
3.	Paralysis.....	558			19	1	2		12	2		8	16	18	10		3	3	1	7	1	1	10		18		
4.	Insanity.....	26			1								1														
5.	Chorea.....	3																									
6.	Epilepsy.....	40			1										1	1							3		1		
7.	Tetanus.....	8											1	1		1											
8.	Convulsions.....	453			4	2	2	1	1	1	11	1	7	1	2	1		1	1		4			2	1	3	2
9.	{ Brain disease.....	407	1		5		4	1	5	7	2	7	2	14	3	2	2	3	1	7		1	9	3	7	1	
	{ Dropsy of brain.....	36			2	1								1			2	1		1	1	1	1	1		1	
10.	Spinal fever.....	74			2	4			1	1			1	2	3		1		1	3	1	1	1		1		
11.	Spotted fever.....																										
12.	Meningitis.....	22			1									1													
13.	Meningitis, cerebro-spinal.....	3			1																				1		
14.	Meningitis, spinal.....	62			1		1			3				4										1			

TABLE 77.—CONTINUED.—*Causes of death, classified.*

Causes of death, 1889.		Counties, 1889.																									
	State.	Alcona.	Alger.	Allagan.	Alpena.	Antrim.	Arenac.	Baraga.	Barry.	Bay.	Benzie.	Berrien.	Branch.	Calhoun.	Cass.	Charlevoix.	Cheboygan.	Chippewa.	Clare.	Clinton.	Crawford.	Delta.	Eaton.	Emmet.	Genesee.	Gladwin.	Gogebic.
8. Intussusception.....	6													1													
9. Stricture of intestines.....	3																										
10. Fistula.....	158			5	1	1	1	1	1	2		1	3	1	1	1	2			2			2				
11. Stomach diseases.....																											
12. Pancreas diseases.....																											
13. Hepatitis.....	6																										
14. { Biliary calculus.....																											
{ Jaundice.....	37			2					1	2		1										1	1				
15. Liver disease.....	119			3					4	3			3	2	4					2			2		4	1	
16. Spleen disease.....	6			1									1														
17. Bowel diseases, etc.....	79			1		1		1	1	1		1		1			1				1			2		3	
18. Mouth disease.....	6																1										
III.—ORDER 5. Urinary organs.....	464	1		8		1			4	8	2	15	19	20	5	1	2			10			2	6	1	15	1
1. Nephritis.....	13							1																			
2. Ischuria.....																											
3. Bright's disease of kidneys.....	239			4					1	6	1	8	11	9	3		1				9			7		8	1
4. Diabetes.....	74			1					2			1	4	4	1						1		1	1	1	3	
5. Calculus (gravel, etc).....	7									1																	
6. Cystitis.....	20											1		2													
7. Kidney disease.....	122	1		3		1				1	1	5	4	5	1	1	1					2				4	

TABLE 77.—CONTINUED.—*Causes of death, classified.*

Causes of death, 1889.		Counties, 1889.																													
		Gd. Traverse.	Gratiot.	Hillsdale.	Houghton.	Huron.	Ingham.	Ionia.	Iosco.	Iron.	Isabella.	Jackson.	Kalamazoo.	Kalkaska.	Kent.	Keweenaw.	Lake.	Lapeer.	Leelanaw.	Lenawee.	Livingston.	Luce.	Macomb.	Manistee.	Manitou.	Marquette.	Mason.	Meosota.	Menominee.	Midland.	
All causes.....	113	188	218	395	234	331	258	131	18	148	439	431	50	1128	48	39	229	93	432	203	11	54	396	212	8	439	169	145	350	70	
Specified causes.....	110	182	213	358	215	326	244	120	15	131	430	411	45	1069	45	35	222	79	418	192	6	38	350	182	5	407	160	139	305	65	
Causes not specified.....	3	6	5	37	19	5	14	11	3	12	9	20	5	59	3	4	7	14	14	11	5	16	16	30	3	32	9	6	45	5	
CLASSES.																															
I.—Zymotic diseases.....		31	53	31	90	59	88	55	39	3	36	113	82	11	295	7	13	48	22	64	32	2	5	57	53	1	135	59	25	107	13
II.—Constitutional diseases.....		16	23	42	26	28	46	51	5	1	25	69	65	5	179	3	9	44	11	87	31	12	67	20	2	34	24	30	30	9	
III.—Local diseases.....		43	60	92	127	66	116	87	36	7	37	153	175	13	367	21	11	87	22	179	91	3	10	153	64	1	72	45	56	57	20
IV.—Developmental diseases.....		15	32	33	75	49	53	43	28	3	22	69	67	9	185	7	1	33	18	71	26	1	6	55	37	1	83	20	19	72	18
V.—Violent deaths.....		5	13	14	40	11	20	8	12	1	8	22	22	7	41	7	2	8	6	15	11	1	5	18	8	73	12	9	38	3	
Unclassified.....		1	1	1	2	3	3	3	3	3	4	4	4	4	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	2	
ORDERS.																															
I.—1. Miasmatic diseases.....		29	53	31	88	59	85	53	38	3	36	111	82	11	290	7	13	48	22	63	32	2	5	56	52	1	135	59	25	106	13
2. Ethnetic diseases.....		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
3. Dietic diseases.....		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
4. Parasitic diseases.....		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
II.—1. Diathetic diseases.....		7	6	10	13	7	8	14	2	4	20	18	1	42	1	3	16	5	28	9	1	1	15	6	6	3	5	8	1	1	
2. Tubercular diseases.....		9	17	34	18	21	38	37	3	1	21	49	47	4	137	2	6	28	6	59	22	12	52	14	2	28	21	25	22	9	
III.—1. Diseases of nervous system.....		19	19	29	52	20	43	22	8	4	16	64	61	8	113	7	5	27	7	66	28	2	3	48	27	16	16	22	27	6	
2. Diseases of organs of circulation.....		7	11	29	5	6	27	21	5	5	6	25	42	5	69	2	1	20	2	38	23	1	2	26	8	8	12	9	25	1	

3. Diseases of respiratory organs.....	8	16	16	39	18	18	20	16	9	28	42	2	8	4	16	10	31	18	2	32	11	25	9	11	17					
4. Diseases of digestive organs.....	6	8	7	25	14	18	16	4	2	2	25	21	2	65	6	10	3	29	12	2	84	14	1	13	7	10	6	5		
5. Diseases of urinary organs.....	1	6	8	5	4	9	7	3	1	3	9	7	1	30	2	1	12	11	8	1	11	2	7	1	2	2	3			
6. Diseases of generative organs.....	1	---	---	---	3	---	---	---	---	---	---	---	---	1	---	---	1	---	---	---	---	---	---	---	---	1	---			
7. Diseases of organs of locomotion.....	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---			
8. Diseases of integumentary system.....	1	---	3	1	1	3	---	---	1	2	2	---	7	---	2	---	3	3	---	2	2	---	3	---	2	---				
IV.—1. Developmental diseases of children.....	6	16	12	59	37	28	18	23	3	17	27	24	5	100	6	---	20	9	20	10	1	5	29	25	32	13	12	62	13	
2. Developmental diseases of women.....	2	3	1	5	6	4	5	3	---	2	4	7	3	17	---	---	2	---	6	1	---	1	4	3	---	4	3	2	2	1
3. Developmental diseases of old people.....	7	13	18	7	5	21	18	1	---	3	31	27	---	56	---	---	8	9	39	10	---	17	7	1	8	3	3	8	3	
4. Diseases of nutrition.....	---	2	4	1	---	2	1	---	2	1	---	7	9	1	12	1	3	---	6	5	---	5	2	---	19	1	2	---	1	
V.—1. Accident or negligence.....	1	3	8	24	5	8	5	6	---	5	10	10	1	12	3	---	4	1	7	8	---	5	3	4	---	11	5	7	14	2
2. Battle.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
3. Homicide.....	---	---	2	2	---	---	---	---	1	---	---	---	2	---	---	---	---	---	---	---	2	---	---	---	---	---	---	---		
4. Suicide.....	2	---	2	1	1	1	1	1	---	4	4	---	7	---	1	1	---	1	---	5	1	2	1	---	2	1	---	---		
5. Execution.....	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---		
6. Violent deaths.....	2	10	4	15	3	9	2	5	1	3	7	8	6	20	4	2	3	4	8	2	---	8	3	---	60	5	2	22	---	
CLASS I.—ZYMOTIC.....	31	53	31	90	59	88	55	89	3	36	113	82	11	295	7	13	48	22	64	32	2	5	57	53	1	133	59	25	107	13
I.—ORDER 1. Miasmatic.....	29	53	31	88	59	85	53	38	3	36	111	82	11	280	7	18	48	22	63	32	2	5	56	52	1	133	59	25	106	13
1. Small-pox.....	---	---	---	---	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	1	---	---	---	---	---	---	---	---	---	
2. Measles.....	2	---	---	3	1	1	1	1	---	---	---	---	---	26	---	1	---	1	---	---	---	1	---	1	7	10	---	2	1	
3. Scarletina.....	---	---	3	2	7	7	1	5	---	5	6	---	---	3	---	1	---	1	8	---	3	---	---	11	---	3	2	1	---	
4. Diphtheria.....	4	1	15	5	7	2	1	1	1	30	14	---	78	1	2	7	---	2	7	2	4	13	14	28	10	1	47	---	---	
5. Quinsy.....	---	---	---	2	1	---	---	1	---	---	---	---	---	1	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
6. Croup.....	4	1	---	5	4	4	1	6	2	3	6	4	---	18	---	1	---	1	---	---	---	2	12	18	4	---	10	---	---	
7. Whooping-cough.....	1	1	1	4	---	---	2	3	---	2	3	---	6	1	1	---	3	1	---	1	---	1	---	2	9	---	2	1	---	

[illegible]

V.-ORDER 4, Suicide	2	3	1	1	1	1	1	4	7	1	1	1	5	1	2	1	2													
1. Wounds					1				1	1			1																	
2. Poison								2									1													
3. Drowning	1													1																
4. Hanging	1		1										1		1															
5. Otherwise and not specified		2		1	1	1		2	4	1	1	3		2			2													
V.-ORDER 5, Execution																														
1. Hanging																														
V.-ORDER 6, Violent deaths not included above	2	10	4	15	3	9	2	5	1	3	7	8	6	20	4	2	3	4	8	2		8	3	60	5	2	22			
UNCLASSIFIED	1	1		2	3				3	4		2		2		2	1									1	2			
1. Head disease																1														
2. Hemorrhage						1					1			1						1										
3. Inflammation		1	1		2	2				2	3			1		1		2								1	2			
4. Otherwise																														
Causes not specified	3	6	5	37	19	5	14	11	3	12	9	20	5	59	3	4	7	14	14	11	5	16	16	30	3	32	9	6	45	5

TABLE 77.—CONTINUED.—*Causes of death, classified.*

Causes of death, 1889.		Counties, 1889.																										
		Missaukee.	Monroe.	Montcalm.	Montmorency.	Muskegon.	Newaygo.	Oakland.	Oceana.	Ogemaw.	Ontonagon.	Oscoda.	Osceola.	Oscoda.	Otsego.	Ottawa.	Presque Isle.	Rosecommon.	Saginaw.	Sanilac.	Schoolcraft.	Shiawassee.	St. Clair.	St. Joseph.	Tuscola.	Van Buren.	Washtenaw.	Wayne.	Wexford.
All causes.....		29	272	295	25	444	116	397	113	25	34	93	18	19	375	46	7	998	264	36	167	450	239	281	281	344	4,005	77
Specified causes.....		28	257	242	21	410	97	382	101	23	31	89	17	16	382	30	7	938	237	30	164	430	233	271	332	332	3,772	72
Causes not specified.....		1	15	23	4	34	19	15	12	2	3	4	1	3	13	16		60	27	6	3	30	6	10	7	12	233	5
CLASSES.																												
I.—Zymotic diseases.....																												
II.—Constitutional diseases.....																												
III.—Local diseases.....																												
IV.—Developmental diseases.....																												
V.—Violent deaths.....																												
Unclassified.....																												
ORDERS.																												
I.—1. Miasmatic diseases.....																												
2. Enanthic diseases.....																												
3. Dietic diseases.....																												
4. Parasitic diseases.....																												
II.—1. Diathetic diseases.....																												
2. Tubercular diseases.....																												
III.—1. Diseases of nervous system.....																												
2. Diseases of organs of circulation.....																												

3. Diseases of respiratory organs.....	2	24	25	2	33	7	29	13	3	5	34	2	1	77	18	2	11	33	15	22	39	25	354	7			
4. Diseases of digestive organs.....	16	15	1	12	3	18	1	1	1	4	18	18	29	15	5	16	19	14	16	9	106	6					
5. Diseases of urinary organs.....	7	6	8	2	20	2	1	6	7	10	7	10	7	1	6	13	6	4	6	15	56	2					
6. Diseases of generative organs.....	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	3	3	3	3					
7. Diseases of organs of locomotion.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	4					
8. Diseases of integumentary system.....	1	2	2	1	1	4	1	1	1	1	2	1	9	3	1	2	1	2	1	2	25	25					
IV.—1. Developmental diseases of children.....	5	24	20	7	57	10	30	15	1	4	11	6	34	10	2	87	27	3	18	49	10	33	18	20	451	6	
2. Developmental diseases of women.....	1	6	1	1	4	1	3	3	1	1	5	5	9	7	8	6	2	6	2	5	43	43	43	43			
3. Developmental diseases of old people.....	1	13	10	17	2	33	4	2	2	5	1	21	36	22	7	19	24	14	11	88	146	5	5				
4. Diseases of nutrition.....	8	1	7	7	4	2	2	2	2	2	6	6	24	3	1	8	4	3	12	10	99	1	1				
V.—1. Accident or negligence.....	1	8	9	1	13	6	8	1	2	2	1	11	2	2	35	10	3	4	16	7	7	4	7	118	118		
2. Battle.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
3. Homicide.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
4. Suicide.....	1	1	2	5	2	1	1	1	1	1	2	1	4	2	2	1	1	1	1	1	1	1	1	1			
5. Execution.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
6. Violent deaths.....	1	4	8	3	6	2	5	1	1	3	7	7	1	9	7	2	2	7	6	3	6	45	2	2			
CLASS I.—ZYMOTIC.....	6	45	62	9	129	25	53	17	3	8	17	10	2	97	5	1	287	49	12	36	105	41	63	47	70	1,065	27
I.—ORDER 1, Miasmatic.....	6	45	62	9	129	25	53	17	3	8	17	10	2	97	5	1	287	49	12	36	105	41	63	47	70	1,065	27
1. Small-pox.....	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
2. Measles.....	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
3. Scarletina.....	9	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
4. Diphtheria.....	5	1	44	4	3	4	3	4	4	4	17	17	97	1	4	2	2	2	10	2	18	233	1	1	1	1	
5. Quinsy.....	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
6. Croup.....	4	14	14	1	1	1	1	1	1	1	6	6	33	4	1	4	18	1	1	1	4	161	161	161	161	161	
7. Whooping-cough.....	2	4	3	2	3	3	3	3	3	3	1	1	2	4	2	4	3	6	3	1	1	29	29	29	29	29	

TABLE 77.—CONTINUED.—*Causes of death, classified.*

Causes of death, 1889.	Counties, 1889.																										
	Missaukee.	Monroe.	Montcalm.	Montmorency.	Muskegon.	Newaygo.	Oakland.	Ocean.	Ogemaw.	Ontonagon.	Osceola.	Oscoda.	Otsego.	Ottawa.	Presque Isle.	Roscommon.	Saginaw.	Sanilac.	Schoolcraft.	Shiawassee.	St. Clair.	St. Joseph.	Tuscola.	Van Buren.	Washtenaw.	Wayne.	Westford.
9. Stricture of intestines.....	1						1													1						1	
10. Fistula.....																											
11. Stomach diseases.....	1	1		1	1	2								4			4	1		2	5	7	4	1	4	37	
12. Pancreas diseases.....																											
13. Hepatitis.....						1														1						1	
14. { Biliary calculus.....																											
{ Jaundice.....		1		1	1						1										2	1	1	1		9	1
15. Liver disease.....	3	1			1	4		1	1	1				1				3		2	2	1	2	4	2	17	2
16. Spleen disease.....						1					1													1			
17. Bowel diseases, etc.....	2			2	1													1			2	2	1			18	
18. Mouth disease.....																		1									
III.—ORDER 5, Urinary organs.....	7	6		8	2	20	2	1	1	6				7			10	7		6	13	6	4	6	15	56	2
1. Nephritis.....	1	1									1										1					3	1
2. Ischuria.....																											
3. Bright's disease of kidneys.....	2	3		7	10	10				4				5			3	2		4	6	1	2	3	5	22	1
4. Diabetes.....	3	1		1	1	1				1							1	1		1	3	2		1	4	4	
5. Calculus (gravel, etc.).....						1																1			1	2	
6. Cystitis.....					1	3																		2	1	2	
7. Kidney disease.....	1	1		1	1	6	2	1	1					2			6	4		1	3	2	2	4	23		

III.—ORDER 6, Generative organs.															
1. { Ovarian disease.....															
2. Disease of uterus.....															
3. Hydrocele.....															
III.—ORDER 7, Organs of locomotion.															
1. Arthritis.....															
2. Joint diseases.....															
III.—ORDER 8, Integumentary system.															
1. Phlegmon.....															
2. Ulcers.....															
3. Skin disease.....															
CLASS IV.—DEVELOPMENTAL DISEASES.															
IV.—ORDER 1, Dev. diseases of children.															
1. Stillborn.....															
2. { Infantile.....															
3. Premature birth.....															
3. Cyanosis.....															
4. Spina bifida.....															
5. Other malformations.....															
6. Teething.....															
7. Injury at birth.....															
IV.—ORDER 2, Dev. diseases of women.....															
1. { Dysmenorrhea.....															
Turn of life.....															

CAUSES OF DEATH, CLASSIFIED.

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V.—ORDER 4, Suicide.....	1	2	5	2	1																					
1. Wounds.....			1									1														
2. Poison.....												1														
3. Drowning.....														1												
4. Hanging.....	1														1			1								
5. Otherwise and not specified.....		2	4	2	1							1		2	1	2	1		1		1	12	1			
V.—ORDER 5, Execution.....																										
1. Hanging.....																										
V.—ORDER 6, Violent deaths not included above.....	1	4	8	3	6	2	5	1			3	7		1	9	7	2	2	7	6	3	6	45	2		
UNCLASSIFIED.....				9		1	1	2							8	3		1	3		1	2	4	10		
1. Head disease.....				3																			2			
2. Hemorrhage.....															2			1	2			1	7			
3. Inflammation.....				6		1	1	2							5	3			1		1	1	3			
4. Otherwise.....															1						2					
Causes not specified.....	1	15	23	4	34	19	15	12	2	3	4	1	3	13	16	60	27	6	3	30	6	10	7	12	233	5

TABLE 78.—CONTINUED.—Specified causes of death.

Sex.	Months, 1889.												Years.							Causes of death.	Ages in periods of years,—1889.																		
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.	1889.	1888.	1887.	1886.	1885.	1884.		Ages in periods of years,—1889.																		
																					Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and over.		
Totals	16	20	24	17	30	25	22	57	50	25	34	32	352	390	339	327	324	350	Bowels, inflam. of	111	25	20	23	26	19	12	14	10	12	14	10	16	10	12	11	8	4	Unknown.	
Males	4	9	10	16	14	13	30	28	12	20	18	18	184	219	188	168	169	185	"	61	14	10	14	11	7	4	6	4	6	10	4	12	5	8	1	2	80 and over.		
Females	12	11	14	7	14	11	9	27	22	13	14	14	168	171	151	159	155	165	"	50	11	10	9	15	12	8	6	6	4	6	4	5	7	8	2	2			
Totals	1	1	1	1	1	1	1	1	1	1	1	1	4	8	6	8	8	8	Bowels, obstruct'n of	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Males	1	1	1	1	1	1	1	1	1	1	1	1	3	6	3	3	5	5	"	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
Females	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	3	3	3	"	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
Totals	1	1	1	1	1	1	1	1	1	1	1	1	8	3	2	2	2	2	Bowels, rupture of.	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1		
Males	1	1	1	1	1	1	1	1	1	1	1	1	6	2	2	1	1	2	"	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
Females	1	1	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	"	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
Totals	1	1	1	1	1	1	1	1	1	1	1	1	2	8	7	4	8	5	Bowels, ulceration of.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Males	1	1	1	1	1	1	1	1	1	1	1	1	2	5	6	2	1	4	"	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
Females	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	2	2	1	"	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
Totals	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Brain, compression of	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Males	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Brain, concussion of	2	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	
Females	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	"	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Totals	1	1	1	1	1	1	1	1	1	1	1	1	3	3	3	1	3	1	"	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Males	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	Brain, disease of	97	8	8	5	5	4	4	6	6	7	6	7	8	5	2	2	1	2		
Females	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	"	57	3	1	1	2	2	3	1	2	3	3	5	2	3	2	1	1	1		
Totals	5	5	12	10	6	5	3	11	9	8	5	4	83	64	91	64	72	66	"	40	5	2	5	3	2	1	5	4	4	3	2	1	2	2	1	1	1		
Males	24	20	34	34	25	20	34	44	39	23	14	30	341	405	319	334	296	310	Brain, inflam. of	214	36	12	8	16	9	8	11	4	8	8	4	4	3	2	2	2	2	2	
Females	14	10	16	18	15	14	22	20	25	12	9	15	190	218	156	172	157	177	"	113	24	5	5	11	6	2	4	1	2	6	4	2	2	1	1	1	1		

Totals.....	6	6	6	7	4	7	6	2	2	10	9	9	74	71	61	68	65	49	Diabetes.....	1	4	8	3	9	5	4	2	3	6	5	7	5	5	4	3	1	
Males.....	4	4	4	4	4	7	5	1	2	5	8	6	54	51	48	46	37	33	".....				3	5	8	6	5	4	1	5	2	6	3	4	2	3	1
Females.....	2	2	2	3				1	1		5	1	3	20	20	23	22	28	16	".....	1	1	1							2	2	1	3	1	2	1	2
Totals.....	1	1	4	2	2	2	1	6	2	4	2	4	31	16	15	15	22	23	Diarrhea, chronic.....	2	1		1	1	1	1	1	1	2	3	5	4	5	4	1		
Males.....	1	1	3	2		2	1	4	2	3	1	3	23	15	12	11	15	20	".....	1									2	1	5	4	5	3	1		
Females.....					2														".....				1	1	1	1	1	1	2				1				
Totals.....	1	1	4	7	9	27	107	134	92	23	10	4	419	355	399	383	238	386	Diarrhea.....	383	3	2	1	1		1	1	1	2	2	1		1	4	2	4	1
Males.....	1		1	3	7	14	51	65	50	11	6	2	211	191	204	186	151	221	".....	197	2	1	1						1	1		1	2	2	2	1	
Females.....		1	3	4	2	13	55	69	42	12	4	2	207	164	195	177	88	164	".....	185	1	1		1		1	1	1	1	1	1		2	2	2		
Unknown.....							1						1					1	".....																		
Totals.....	67	49	62	41	40	44	43	49	69	108	130	146	848	717	935	1117	1054	1065	Diphtheria.....	400	299	82	35	11	7	2	2	1	3	1		1		4			
Males.....	32	17	37	23	22	25	27	26	37	60	66	68	430	370	474	553	503	501	".....	193	156	41	19	6	2	1		2	1		1		2				
Females.....	35	32	25	18	18	19	16	23	42	48	64	78	418	347	461	564	551	563	".....	201	143	41	16	5	5	1	2	1	1								
Unknown.....													1					1	".....																		
Males.....																			Drinking, cold water.....																		
Males.....													1	4	2	1	3		Dropsy of bowels.....																		
Females.....													3	3	3				".....																		
Totals.....	2	5		1	5	4	3	4	2	3	3	4	36	39	57	34	27	41	Dropsy of brain.....	30	2	2	1									2					
Males.....	2	3		1	3	3	3	1	2	3	2		26	25	32	14	12	19	".....	21	2	2	1								1						
Females.....				2	1		1	1	1	1		2	10	14	25	20	15	22	".....												1						
Males.....													2	3	1	1	1	1	Dropsy of chest.....																		
Females.....													1						".....																		
Totals.....	8	3	6	3	3	6	3	11	3	6	9	5	61	86	107	64	69	70	Dropsy of heart.....	1	1	2		2	1	1	6	3	5	6	3	4	12	5	5	1	
Males.....	2	1	1	1	1	2	1	5	1	2	3	3	23	37	54	29	38	30	".....				1			1	2	1		1	2	1	2	7	3	2	
Females.....	1	2	5	2	2	4	2	6	2	4	6	2	38	49	53	35	31	40	".....				1	1	2	1		4	2	3	4	2	5	2	3	1	
Males.....													1	1					Dropsy of kidneys.....																		
Males.....													2						Dropsy of liver.....																		
Females.....																			".....																		

TABLE 78.—CONTINUED.—Specified causes of death.

Sex.	Months, 1889.												Years.					Causes of death.	Ages in periods of years,—1889.																				
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Unknown.	1889.	1888.	1887.	1886.		1885.	1884.	Ages in periods of years,—1889.																		
																					Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and over.	Unknown.	
Females														3	2	1	2	Fever, nervous.																					
Males														1	3	2	1	2	Fever, remittent																				
Females														2	1	1	2	"	1																				
Males				1				1						2	8	4	4	6	Fever, rheumatic.																				
Females					2		1	1						5	4	7	3	2	5	"																			
Totals	3	5	7	7	5	6	7	11	6	6	5			74	74	79	77	74	107	Fever, spinal	54	10	2	1	3	2	1	1											
Males		4	5	3	3	5	2	7	3	5	3			40	36	43	33	42	62	"	26	9	1	1	1	1	1												
Females	3	5	3	2	3	1	5	4	3	1	2			34	38	36	44	32	45	"	28	1	2	2	1														
Males															1	1	2	1	Fever, spotted																				
Females															1	1	2	1	"																				
Totals	30	26	27	27	19	32	28	67	95	126	98	59	3	637	638	770	498	387	514	Fever, typhoid	63	48	54	73	112	63	48	27	30	28	21	11	13	12	9	10	114		
Males	16	17	14	17	10	17	17	33	62	76	61	30	2	372	353	439	262	210	261	"	33	26	24	36	69	44	29	20	15	17	14	7	7	7	5	111			
Females	14	9	13	10	9	15	11	34	33	50	37	29	1	265	285	331	236	176	252	"	30	22	30	37	43	19	19	7	15	11	7	4	6	5	2	5	3		
Unknown																				"																			
Totals	2	2	1			4	3	8	10	8	7	2	1	43	31	52	25	7	29	Fever, typho-mal'ri	5	2	5	4	9	5	2	3	1	1	2								
Males	2					2	2	2	6	5	5			24	16	25	15	5	17	"	2		2	1	8	3	2	1											
Females	2	1				2	1	1	4	3	2	1	1	19	15	27	10	2	12	"	3	2	3	3	1	2		2	1	1									
Females														1						Fever, mountain																			
Males						1								3	2	4	1			Fever, typhus																			
Females									1					1		3	1	1	5	"																			
Totals	3	4	9	9	3	2	9	7	9	12	4	7		78	112	78	85	58	79	Fever (unspecified)	31	9	5	7	10	2	3	1	2	2									

[illegible]

CAUSES OF DEATH, SPECIFIED.

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[illegible]

UNUSUAL CAUSES OF DEATH.

In Table 78 there were compiled 416 deaths under the head of "Casualty." In Table 79 following may be found certain facts concerning these deaths. For 1888 there were compiled 364 accidental deaths.

TABLE 79.—Deaths in Michigan in 1889 compiled as "Casualty."

Casualty,—causes as returned.	No.	Casualty,—causes as returned.	No.
Total number tabulated as casualty in Table 78.....	416	Falling down shaft.....	1
Accidental, unclassified.....	217	Falling from tramway.....	1
Accidentally burned.....	1	Falling building.....	2
Accidentally shot.....	28	Falling rails.....	1
Bitten by a dog.....	1	Fell in a well.....	2
Buried in a well.....	1	Killed in a scuffle.....	1
Carriage collision.....	1	Killed by a wagon.....	1
Caving of bank.....	2	Killed in elevator.....	1
Cut with glass.....	1	Killed by land roller.....	1
Cut with an ax.....	1	Killed in a log jam.....	1
Crushed by logs.....	10	Killed by explosion.....	2
Crushed with rock.....	1	Killed in woods.....	3
Explosion of boiler.....	2	Killed in a boat.....	2
Explosion of dynamite.....	3	Killed in a mill.....	12
Explosion of gasoline.....	1	Killed in ship yard.....	1
Explosion of powder.....	2	Killed in mine.....	29
Eating prune pits.....	1	Killed by a bull.....	2
Fall from building.....	7	Killed by a horse.....	22
Fall from horse.....	1	Runaway.....	7
Fall from hammock.....	1	Run over by a wagon.....	1
Fall from scaffold.....	1	Smothered in wheat bin.....	1
Fall of derrick.....	1	Swallowing stone.....	1
Fall.....	29	Thrown from carriage.....	8

STATISTICS CONCERNING SUICIDE.

In Table 80 may be found statistics concerning the number of deaths by suicide for the last fifteen years, including 1889. The number this year being much less than for the two preceding years.

It will be noticed that only one person of African blood is numbered in the list, and that the farmers are much more inclined to self destruction than any other class of people. The nativity, means used, and certain comparisons relating to deaths by suicide can be seen by the different divisions of this table.

TABLE 80.—*Certain facts concerning persons returned as having died by suicide in Michigan during the years 1875-1889.*

Years.	Months of deaths.													Years.	Sex.			Color.	Condition.				
	Number.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.		Unknown.	Totals.	Males.		Females.	White.	Married.	Single.	Widowed.	Unknown.
Totals.....	1146	61	48	72	103	112	112	92	106	97	103	109	112	6	Totals.....	1146	883	262	1146	688	303	107	49
1875.....	52	3	4	3	4	8	4	4	4	5	3	6	4	..	1875.....	52	42	10	52	34	10	3	5
1876.....	54	3	1	3	7	7	8	2	4	5	6	5	3	..	1876.....	54	43	11	54	35	12	3	4
1877.....	66	2	5	7	4	7	5	6	7	4	2	7	10	..	1877.....	66	46	20	66	38	23	2	3
1878.....	63	5	2	5	5	5	9	5	7	5	6	5	4	..	1878.....	63	40	23	* 63	41	16	4	2
1879.....	59	3	2	4	7	3	8	5	7	5	4	4	7	..	1879.....	59	46	13	59	35	19	3	2
1880.....	65	4	3	6	8	9	6	3	4	7	2	6	6	1	1880.....	65	50	15	65	38	20	4	3
1881.....	57	1	5	3	3	4	4	7	9	7	4	6	4	..	1881.....	57	42	15	57	34	11	9	3
1882.....	62	2	3	4	6	8	7	2	7	5	7	4	6	1	1882.....	62	44	18	62	32	24	3	3
1883.....	91	5	1	7	9	5	8	11	9	4	6	16	10	..	1883.....	91	69	22	91	53	23	12	3
1884.....	104	4	5	7	8	6	16	8	8	14	10	10	8	..	1884.....	104	84	20	104	71	28	4	1
1885.....	91	4	4	3	7	7	9	9	11	4	14	10	8	1	1885.....	† 91	78	12	91	55	19	13	4
1886.....	82	7	2	4	6	13	5	4	11	9	7	5	9	..	1886.....	82	64	18	82	46	20	11	5
1887.....	105	3	4	10	12	11	5	10	12	10	13	6	9	..	1887.....	105	75	30	105	63	28	10	4
1888.....	101	6	4	3	10	13	11	9	7	9	11	8	8	2	1888.....	101	82	19	101	54	31	12	4
1889.....	94	9	3	3	7	6	7	7	9	4	8	11	16	1	1889.....	94	78	16	94	59	19	14	2

* One mulatto.

† One sex unknown.

TABLE 80.—CONTINUED.—*Suicidal deaths.*

Occupations.	No.	Occupations.	No.	Occupations.	No.
Agents.....	8	Farmer's wives.....	3	Peddlers.....	4
Architects.....	1	Gardeners.....	2	Physicians.....	7
Bakers.....	2	Grain dealers.....	1	Photographer.....	1
Bankers.....	2	Harness-makers.....	2	Policemen.....	1
Barbers.....	2	Hatters.....	1	Printers.....	4
Blacksmiths.....	6	Hotel-keepers.....	4	Prostitutes.....	7
Book-keepers.....	11	House-keepers.....	97	Sailors.....	5
Brewers.....	4	House-wives.....	30	Salesmen.....	3
Brick-makers.....	8	Housework.....	2	Saloon-keepers.....	22
Brick-masons.....	1	Insurance agents.....	3	Seamstresses.....	1
Businessmen.....	3	Laborers.....	162	Servants.....	27
Butchers.....	5	Lawyers.....	6	Ship-carpenters.....	1
Cabinet-makers.....	8	Lumberman.....	4	Shoemakers.....	14
Carriage-trimmers.....	1	Machinists.....	5	Soldiers.....	8
Carpenters.....	29	Manicure.....	1	Stave-makers.....	1
Cigar-makers.....	5	Masons.....	8	Students.....	5
Clerks.....	22	Mechanics.....	11	Tailors.....	8
Conductors.....	1	Merchants.....	20	Tanners.....	3
Contractors.....	1	Millers.....	3	Teachers.....	5
Coopers.....	5	Milliners.....	1	Teamsters.....	5
Cutters.....	1	Miners.....	5	Tinners.....	2
Dentists.....	1	Ministers.....	1	Unemployed.....	44
Domestics.....	5	Mill owners.....	1	Unknown.....	134
Draymen.....	5	Miscellaneous.....	9	Upholsterers.....	1
Druggists.....	3	Musicians.....	4	Waiters.....	1
Engineers.....	5	Painters.....	8	Weavers.....	3
Farmers.....	358				
Total.....					1,199

CAUSES OF DEATH—SUICIDES.

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TABLE 80.—CONTINUED.—*Suicidal deaths.*

Nativity.	No.	Nativity.	No.	Nativity.	No.
Austria.....	1	Kentucky.....	1	Poland.....	3
Bohemia.....	1	Maine.....	3	Prussia.....	10
Canada.....	70	Massachusetts.....	6	Rhode Island.....	1
Colorado.....	1	Michigan.....	278	Russia.....	1
Connecticut.....	6	Minnesota.....	1	Scotland.....	15
Delaware.....	1	Netherlands.....	2	Sweden.....	10
Denmark.....	2	New Hampshire.....	3	Switzerland.....	3
England.....	58	New Jersey.....	8	Texas.....	1
France.....	6	New York.....	204	United States.....	2
Germany.....	225	North Carolina.....	1	Unknown.....	89
Holland.....	10	Norway.....	1	Vermont.....	15
Illinois.....	3	Nova Scotia.....	2	Virginia.....	2
Indiana.....	11	Ohio.....	65	Wisconsin.....	9
Ireland.....	35	Pennsylvania.....	30	Zealand.....	2
Italy.....	1				
Total.....					1,199

Means used.	No.	Means used.	No.	Means used.	No.
Burning.....	1	Insanity.....	1	Shooting.....	118
Cutting throat.....	26	Poison.....	175	Starving.....	1
Drowning.....	68	Run over by cars.....	2	Strangulation.....	2
Dynamite.....	1	Severing artery.....	3	Unknown.....	645
Hanging.....	161				
Total.....					1,199

PRINCIPAL CAUSES OF DEATH.

Fifteen of the principal causes of death for the year 1889 are given in Table 81. As usual consumption heads the list, though, in common with the other diseases, there is a decrease in the number for 1889 as compared with 1888. Heart disease, cancer, convulsions, croup and dropsy are the diseases which show an increase over 1888.

TABLE 81.—*Mortality in Michigan from fifteen principal causes, as returned for the year 1889.*

Order.	Specified causes and conditions, 1889.	Number of deaths.				Percent from each cause to deaths from all causes.		
		Totals.	Males.	Females.	Unk.	Totals.	Males.	Females.
1	Consumption.....	2,137	987	1,150	-----	10.51	8.99	12.07
2	Stillborn.....	1,202	692	488	27	5.92	6.31	5.20
3	Pneumonia.....	1,048	606	442	-----	5.11	5.52	4.75
4	Heart disease.....	976	533	443	-----	4.80	4.85	4.76
5	Old age.....	965	512	453	-----	4.75	4.66	4.87
6	Diphtheria.....	848	430	418	-----	4.17	3.91	4.50
7	Cholera Infantum.....	722	390	331	1	3.55	3.55	3.56
8	Apoplexy and Paralysis.....	680	390	290	-----	3.34	3.55	3.12
9	Typhoid Fever.....	637	372	265	-----	3.14	3.39	2.85
10	Cancer.....	492	202	290	-----	2.42	1.84	3.12
11	Convulsions.....	453	256	196	1	2.23	2.33	2.11
12	Croup.....	408	192	211	-----	1.98	1.75	2.27
13	Dropsy.....	398	195	203	-----	1.96	1.78	2.18
14	Brain, Inflammation of.....	341	190	151	-----	1.19	1.73	1.62
15	Measles.....	104	51	53	-----	.51	.46	.57
	Totals.....	11,406	5,998	5,379	29	55.70	54.50	57.74
	All causes.....	20,315	10,984	9,297	34	100.00	100.00	100.00

MORTALITY FROM TEN PROMINENT CAUSES IN 1889.

Ten prominent causes of death for 1889 are considered in Tables 82 and 83. As usual cancer and typhoid fever are the leading causes of death for all ages, while croup, diphtheria and whooping cough caused most deaths for those aged under five years. The fatality of the diseases for the time of the year, age of decedents, and per cent of deaths from the different causes are given in these tables. The diseases are also further considered in relation to meteorological conditions.

TEN SPECIFIED CAUSES OF DEATH.

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TABLE 82.—Deaths from ten specified causes returned for the year 1889, exhibiting the number of each sex, total number in each month and at different periods of age.

Sex, months and ages.		Causes of death, 1889.									
		Cancer.	Cephalitis.	Croup. ^a	Diarrhea. ^b	Diphtheria.	Dysentery. ^c	Measles.	Scarlet fever.	Typhoid fever.	Whooping cough.
Sex.	Totals	492	341	408	450	848	158	104	240	637	140
	Males	202	190	192	234	490	87	51	110	372	65
	Females	290	151	211	215	418	71	53	130	265	75
	Unknown				1						
Months.	January	33	24	30	2	67		5	25	30	7
	February	38	20	33	2	49	1	7	19	26	10
	March	36	34	37	8	62	5	14	22	27	16
	April	43	34	28	9	41	5	8	19	27	12
	May	28	25	17	11	40	3	8	27	19	12
	June	45	20	19	29	44	3	10	16	32	9
	July	42	34	20	108	43	6	12	18	28	14
	August	55	44	20	140	49	55	6	15	67	22
	September	49	39	29	94	69	47	10	18	95	18
	October	41	23	42	27	103	24	4	18	126	9
	November	43	14	53	12	130	6	9	13	96	5
	December	38	30	75	8	146	3	11	25	59	6
	Unknown	1								3	
	Av. month ^d	41	23	34	38	71	7	9	20	53	12
Ages.	Under 5	12	214	331	395	400	33	36	151	63	131
	5 to 10	1	36	64	3	299	8	6	56	43	7
	10 to 15	1	12	4	3	82	4	1	23	54	
	15 to 20	6	8		1	35	1	1	2	73	
	20 to 25	4	16		2	11	3	2	1	112	
	25 to 30	18	9		1	7	3	5	1	63	
	30 to 35	18	3	1	2	2	1		2	43	
	35 to 40	22	11		2	2	2			27	
	40 to 45	42	4		2	1	4		1	30	
	45 to 50	50	3		5	3		1		28	
	50 to 55	49	8	1	7	1	4			21	
	55 to 60	56	4		1		3		1	11	
	60 to 65	47	4		4		10			13	
	65 to 70	56	3		6	1	8	1		12	
	70 to 75	57	2		8		8		1	9	
	75 to 80	30	2		3		5			10	
	80 and over	20			4		6	1		1	
	Unknown	3	2	2	1	4	5		1	14	2

^a Includes 46 membranous croup.
^c Includes 4 chronic.

^b Includes 31 chronic.
^d Excluding unknown month.

TABLE 83.—*Per cent of deaths returned for the year 1889, from each of ten specified causes to deaths from all causes, and per cent of each sex, of deaths in each month and at different periods of life, to total deaths from each specified cause.*

Sex, months and ages.		Causes of death 1889, per cent of total.									
		Cancer.	Cepha- litis.	Croup.	Diar- rhea.	Deph- theria.	Dysen- tery.	Measles.	Scarlet Fever.	Typhoid Fever.	Whoop- ing Cough.
Per cent of all causes.		2.42	1.68	1.98	2.22	4.18	.78	.51	1.18	3.14	.69
Sex.	Males	41.06	55.72	47.64	52.00	50.70	55.06	49.04	45.88	58.89	46.42
	Females	58.94	44.28	52.36	47.78	49.30	44.94	50.96	54.17	41.61	53.58
	Unknown .....				.22						
Months.	January	6.72	7.04	7.44	.44	7.90		4.80	10.42	4.70	5.00
	February	7.72	5.86	8.19	.44	5.77	.63	6.73	7.92	4.08	7.14
	March	7.32	9.97	9.18	1.78	7.31	3.16	13.46	9.17	4.24	11.43
	April	8.74	9.97	6.95	2.00	4.88	3.17	7.69	7.92	4.24	8.57
	May	5.69	7.38	4.22	2.44	4.72	1.90	7.69	11.25	2.98	8.57
	June	9.14	5.87	4.72	6.45	5.19	1.90	9.62	6.66	5.02	6.43
	July	8.54	9.97	4.96	24.00	5.07	3.80	11.54	7.50	4.40	10.00
	August	11.18	12.90	4.96	31.11	5.78	34.80	5.77	6.25	10.25	15.71
	September	9.96	11.44	7.20	20.89	8.14	29.75	9.62	7.50	14.92	12.86
	October	8.33	6.74	10.42	6.00	12.74	15.19	3.85	7.50	19.78	6.43
	November	8.74	4.11	13.15	2.67	15.33	3.80	8.65	7.50	15.39	3.57
	December	7.72	8.80	18.61	1.78	17.22	1.90	10.58	10.41	9.26	4.29
	Unknown .....	.20								.47	
	Average month *	8.33	8.21	8.44	8.44	8.37	4.43	8.65	8.33	8.32	8.57
Ages.	Under 5	2.44	62.71	82.13	87.78	47.17	52.53	82.70	62.92	9.89	96.57
	5 to 10 .....	.20	10.56	15.88	.67	35.26	5.06	5.77	23.33	7.54	5.00
	10 to 15 .....	.20	3.52	.99	.67	9.67	2.53	.96	9.58	8.48	
	15 to 20	1.22	2.35		.22	4.13	.63	.96	.83	11.46	
	20 to 25 .....	.81	4.69		.44	1.80	1.90	1.93	.42	17.58	
	25 to 30	3.66	2.64		.22	.83	1.90	4.80	.42	9.89	
	30 to 35	3.66	.88	.25	.44	.24	.63		.83	7.54	
	35 to 40	4.47	3.23		.44	.24	1.27			4.24	
	40 to 45	8.54	1.18		.45	.11	2.53		.42	4.71	
	45 to 50	10.16	.88		1.11	.35		.96		4.88	
	50 to 55	9.96	2.36	.25	1.56	.12	2.53			3.30	
	55 to 60	11.38	1.18		.22		1.90		.42	1.73	
	60 to 65	9.55	1.18		.89		6.83			2.04	
	65 to 70	11.38	.88		1.38	.11	5.06	.96		1.89	
	70 to 75	11.59	.59		1.78		3.07		.42	1.40	
	75 to 80	6.10					3.17				
80 and over	4.07			.89		3.80	.96		.16		
Unknown .....	.61	.59	.50	.22	.47	3.17		.41	2.20	1.43	

* Excluding deaths in unknown months.

MORTALITY FROM CANCER.

Table 84 gives the number of deaths from cancer for 1872 and 1889 inclusive. The number for 1889 was 492, twelve more than for 1888. With the exception of the three years, 1882, 1884, and 1886, there has been a constant increase in deaths from this cause since 1871. The table, as may be seen, gives the number in groups indicating the part of the body affected. The number in which the part was not specified is 2,730.

TABLE 84.—Deaths from cancer in Michigan returned for the years 1872-1889, indicating part of body affected.

Part affected.	Totals.	Males.	Females	Part affected.	Totals.	Males.	Females
Aggregate, years 1872-1889.....	5,597	2,399	3,198	Cancer of lip.....	1	1	-----
Cancer of arm.....	6	3	3	Cancer of liver.....	125	70	55
Cancer of bladder.....	16	13	3	Cancer of lungs.....	13	7	6
Cancer of bowels.....	111	41	70	Cancer of mouth.....	75	50	25
Cancer of breast.....	376	24	352	Cancer of neck.....	24	17	7
Cancer of ear.....	2	1	1	Cancer of nose.....	2	2	-----
Cancer of eye.....	15	7	8	Cancer of œsophagus.....	3	1	2
Cancer of face.....	177	125	49	Cancer of pancreas.....	3	2	1
Cancer of foot.....	3	3	-----	Cancer of rectum.....	20	11	9
Cancer of gall bladder.....	1	-----	1	Cancer, rose.....	8	4	4
Cancer in groin.....	4	3	1	Cancer of shoulder.....	2	2	-----
Cancer of hand.....	3	2	1	Cancer of side.....	12	2	10
Cancer of head.....	31	19	12	Cancer of spine.....	5	2	3
Cancer of heart.....	6	2	4	Cancer of stomach.....	1,442	870	572
Cancer of hip.....	1	1	-----	Cancer of throat.....	73	42	31
Cancer, internal.....	31	9	22	Cancer of tongue.....	20	10	10
Cancer of kidneys.....	7	6	1	Cancer (unspecified).....	2,730	1,081	1,699
Cancer of leg.....	19	13	6	Cancer of urethra.....	1	-----	1
				Cancer, uterus.....	229	-----	229

METEOROLOGY AND ITS RELATION TO DEATHS.

Each year there has been published in these reports some of the results of meteorological observations made by observers for the State Board of Health, the U. S. Signal Service, and at the State Agricultural College. The principal conditions exhibited in the following tables are temperature, humidity of the air, ozone, velocity of the wind and pressure of the atmosphere. Study is here made of the occurrence of deaths from different diseases in connection with the above conditions as observed at representative stations in Michigan during the same year and months.

Through the kindness of the Secretary of the State Board of Health, we have been allowed the use of these statistics.

Table 85 shows that the annual average temperature for 1889 was higher than for any of the years included in the table.

The stations represented in the lines for average temperature for the years 1880-1889 in Table 85 are the following: Thornville, Kalamazoo, Lansing; Mendon for 1880-1882; Tecumseh for 1880, 1885 and 1888; Battle Creek for 1880, 1880, 1882, 1885, 1888; Nirvana

first four months of 1880; Reed City for last eight months of 1880 and 1881-1885; Otisville for 1880 and 1881; Niles for 1880 and 1881; Marquette for 1880, 1884, 1886 and 1887; Alpena, Grand Haven, Port Huron, Detroit for 1880-1887; Washington for 1880-1883; Agricultural College for 1881-1888; Escanaba for 1880-1887; Harrisville for 1881 and 1882, 1885 and 1886; Ann Arbor for 1881-1888; Parkville for 1881 and 1882; Traverse City for 1882-1888; Hillsdale for 1882-1884; Marshall for 1882-1888; Winfield for 1881 and 1883; Hudson and Mallory Lake for 1881; Ionia for 1883-1885; Manistique, Swartz Creek for 1884 and 1885; Mackinaw City for 1884-1887; Port Austin for 1885 and 1888; Muskegon, Pentwater for 1886; Gulliver Lake, Birmingham, Otsego for 1887 and 1888.

TABLE 85.—TEMPERATURE.—Average by years and by months, for the years 1870-1889 inclusive, at representative stations in Michigan.

Years.	Annual average.	Average temperature, stated in degrees Fahrenheit, by months.											
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1880 (15 stations).....	46.55	34.06	27.93	31.00	44.89	62.27	67.41	69.39	68.07	59.54	46.69	27.24	20.67
1881 (20 stations).....	47.22	14.98	19.75	29.36	40.53	62.72	63.32	72.95	71.76	67.99	51.87	37.42	34.08
1882 (22 stations).....	47.14	24.32	33.42	34.12	42.65	51.04	64.43	67.84	69.05	61.70	53.53	37.90	25.72
1883 (19 stations).....	43.52	15.78	20.03	24.63	43.00	51.37	64.73	68.36	65.41	57.24	46.73	38.10	26.89
1884 (20 stations).....	44.72	15.14	20.94	28.78	42.00	54.38	67.04	66.70	66.10	64.72	51.56	34.53	24.77
1885 (21 stations).....	42.36	15.46	10.21	19.51	41.39	53.32	63.39	71.13	63.23	59.14	45.78	38.14	27.59
1886 (17 stations).....	44.82	18.72	21.18	30.10	46.04	54.69	63.31	68.68	67.36	61.15	51.84	34.32	20.44
1887 (17 stations).....	44.82	16.58	21.57	25.55	42.09	60.68	66.53	73.22	66.41	57.95	44.46	35.18	27.57
1888 (13 stations).....	45.03	15.93	21.65	25.89	42.81	53.40	63.03	70.95	68.05	58.20	46.01	38.73	30.73
1889 (13 stations).....	47.36	28.18	18.57	35.83	46.04	56.74	63.05	70.69	68.58	61.36	44.59	37.95	36.76
Average for 10 years *.....	45.35	19.91	21.53	28.48	43.09	56.06	65.12	70.00	67.40	60.90	48.31	35.95	27.52

* Average for the ten years ending with 1889.

The Stations represented in the lines for average atmospheric pressure for the years 1880-1889 in Table 86 are the following: Lansing for 1880-1888; Kalamazoo for 1880, 1882, and 1885-1888; Battle Creek for 1880, 1882, 1888; Detroit, Alpena, Grand Haven, Port Huron 1880-1887; Mendon for 1881-1883; Marquette for 1880, 1884, 1886 and 1887; Agricultural College, Ann Arbor for 1881-1888; Otisville for 1880 and 1882; Tecumseh for 1880 and 1882-1885; Washington 1880, 1882 and 1883; Nirvana for first 4 months of 1880; Reed City for last 8 months of 1880-1885; Thornville for 1880-1881 and 1884-1888; Escanaba for 1880, 1882-1887; Traverse City for 1882-1888; Harrisville for 1882 and 1885-1888; Hastings for 1882; Hillsdale for 1882 and 1883; Port Austin for 1883, 1884 and 1888; Marshall for 1883-1888; Manistique 1884 and 1885; Mackinaw City for 1884-1887; Ionia for 1884 and 1885; Swartz Creek for 1885; Birmingham for 1888 and 1887; Gulliver Lake for 1888.

TABLE 86.—PRESSURE OF THE ATMOSPHERE.—*Observations of barometers reduced to freezing point for each of the years 1880-1889, inclusive, and the average for ten years, at representative stations in Michigan.*

Years.	No. of stations.	Annual average.	Pressure of the atmosphere, stated in inches of mercurial column, by months.											
			January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1880...	14	29.138	29.134	29.105	29.191	29.048	29.092	29.085	29.106	29.163	29.153	29.150	29.231	29.139
1881...	12	29.151	29.209	29.222	28.979	29.120	29.175	29.082	29.146	29.180	29.122	29.220	29.164	29.187
1882...	21	29.138	29.186	29.121	29.149	29.153	29.123	29.001	29.115	29.112	29.202	29.134	29.224	29.135
1883...	17	29.189	29.221	29.328	29.145	29.125	29.099	29.072	29.140	29.233	29.238	29.275	29.182	29.205
1884...	18	29.205	29.274	29.204	29.202	29.147	29.131	29.273	29.100	29.216	29.210	29.268	29.213	29.229
1885...	19	29.152	29.300	29.119	29.186	29.194	29.092	29.181	29.126	29.151	29.195	29.145	29.092	29.135
1886...	15	29.192	29.188	29.198	29.126	29.230	29.128	29.161	29.159	29.166	29.222	29.331	29.137	29.226
1887...	15	29.215	29.118	29.310	29.250	29.152	29.204	29.203	29.188	29.234	29.305	29.185	29.211	29.218
1888...	12	29.158	29.278	29.129	29.203	29.250	29.065	29.069	29.166	29.144	29.174	29.070	29.202	29.143
1889...	12	29.128	29.068	29.177	29.089	29.116	29.060	29.100	29.104	29.192	29.131	29.228	29.135	29.141
Average *.		29.17	29.19	29.19	29.15	29.15	29.12	29.12	29.14	29.18	29.20	29.20	29.18	29.18

* Average for the years ending with 1889.

Croup—There were 403 deaths caused by croup, according to the returns for 1889. This is less than for 1888, when there were reported 474 deaths from this disease. The ratio of mortality from croup to the total mortality was 1.98 per cent, or 20 per cent less than for 1888. The most fatal months and interesting comparisons of meteorological conditions may be seen by the table following:

TABLE 87.—Deaths returned from croup in Michigan, by months, during the year 1889, and certain meteorological conditions at representative stations in Michigan, during the same year and months.

Months in order by number of deaths from croup, greatest first.	Deaths from croup, 1889.		Temperature, degrees Fahr.		Humidity of atmosphere, etc., monthly averages.				Ozone, — relative maximum =10.		Average velocity of wind, miles per hour, by registering anemometer.	Average pressure of atmosphere (barometer re- duced to 32° Fahr.)
	Number.	Per cent of Total.	Average daily range by registering thermometers.	Average of three daily observations.	Relative per cent of saturation.	Absolute grains of vapor in a cubic foot of air. ^a	Weight in troy ounces of vapor in- haled by one person in 24 hours. ^b	Weight in troy ounces of vapor ex- haled from air passages in 24 hours in excess of vapor inhaled. ^c	Day, — 7 a. m. to 2 p. m.	Night, — 9 p. m. to 7 a. m.		
Number of stations in- cluded in meteorolo- gical averages.....	4408	100.00	16	13	9	9	9	9	8	8	7	12
More than the Av. No. of deaths.												
December.....	75	18.61	13.41	36.76	84	2.43	1.52	10.16	3.83	4.05	11.0	29.141
November.....	53	13.15	11.81	37.95	84	2.52	1.57	10.11	3.62	3.86	9.7	29.135
October.....	42	10.42	16.98	44.59	73	2.76	1.73	9.95	3.54	3.29	8.8	29.228
March.....	37	9.18	16.74	35.88	77	2.13	1.33	10.35	3.95	4.15	9.4	28.089
Average.....	34	8.33	17.46	47.36	77	3.47	2.17	9.51	3.98	4.05	9.2	29.128
Less than the average No. of deaths.												
February.....	33	8.19	17.32	418.57	88	1.34	1.82	10.86	4.15	4.29	10.7	29.177
January.....	30	7.45	13.93	428.18	85	1.77	1.11	10.57	4.31	3.89	10.2	29.068
September.....	29	7.20	20.59	61.36	74	4.82	3.01	8.67	3.97	3.70	9.1	29.131
April.....	28	6.95	18.74	446.04	71	2.88	1.80	9.88	3.91	4.30	9.5	29.116
August.....	20	4.96	21.50	68.58	70	5.52	3.45	8.23	3.93	4.08	7.7	29.192
July.....	20	4.96	21.20	70.69	75	6.19	3.87	7.81	3.80	3.97	6.9	29.104
June.....	19	4.71	18.00	63.05	80	5.33	3.33	8.35	4.61	5.00	7.5	29.100
May.....	17	4.22	19.28	56.74	69	3.95	2.47	9.21	4.19	4.51	9.9	29.060

^a Calculated from readings of dry bulb and wet bulb thermometers.

^b Calculated for 13 respirations per minute of 20 cubic inches of air each.

^c Assuming the air exhaled to be saturated with vapor at the temperature of 98° F., each cubic foot containing 13.69 grains, 13 respirations per minute, of 20 cubic inches of air each, making 11.68 Troy ounces of vapor exhaled daily. No correction made for expansion of air after being inhaled.

^d Includes 46 deaths from membranous croup.

^e Exceptions to the proposition that *more* than an average number of deaths from croup occurred in months when the average daily temperature was *less* than the average, and *vice versa*.

^f Exceptions to the proposition that *more* than the average number of deaths from croup occurred in months when there was *less* than the average quantity of vapor inhaled, and *vice versa*.

Diphtheria—The number of deaths caused by this disease for several years can be seen in the following statement:

1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.
887	1,478	1,542	2,063	1,416	1,007	1,065	1,054	1,117	985	717	848

As usual there were more deaths in the last months of the year, and more than three-quarters of the deaths occurred among children under ten years of age.

The exhibit following shows the number of deaths from diphtheria for each of the geographical divisions of the State, and in Table 88 the disease is considered in relation to climatic conditions:

TABLE 87.—*Relative prevalence of diphtheria in 1889 in each of the eleven geographical divisions of the State.*

State and geographical divisions.	Total mortality from all causes.	Deaths from diphtheria.	Per cent of deaths from diphtheria to deaths from all causes.
State	20,315	848	4.17
Upper Peninsula	1,757	120	6.80
Northwestern	539	15	2.78
Northern	418	11	2.63
Northeastern	386	2	.52
Western	2,384	155	6.50
Northern central	524	2	.38
Eastern	2,906	130	4.34
Central	2,424	89	1.61
Southwestern	1,098	33	3.01
Southern central	2,748	87	3.17
Southeastern	5,041	254	5.04

TABLE 88.—Deaths returned from diphtheria in Michigan, by months, during the year 1889, and some coincident meteorological conditions, at representative stations in Michigan during the same year and months.

Months in order by number of deaths from diphtheria, greatest first.		Deaths from diphtheria, 1889.		Temperature, degrees Fahr.		Humidity of atmosphere, etc., monthly averages.				Ozone, — relative maximum =10.		Average velocity of wind, miles per hour, by registering anemometer.	Average pressure of atmosphere, (barometer reduced to 32° Fahr.)
		Number.	Per cent of total.	Average daily range by registering thermometer.	Average of three daily observations.	Relative per cent of saturation.	Absolute grains of vapor in a cubic foot of air. ^a	Weight in Troy ounces of vapor In- haled by one person in 24 hours. ^a	Weight in Troy ounces of vapor ex- haled from air passages in 24 hours in excess of vapor inhaled. ^a	Day, —7 a. m. to 2 p. m.	Night, —0 p. m. to 7 a. m.		
Number of stations in- cluded in meteoro- logical averages.....		848	100.00	16	13	9	9	9	9	8	8	7	12
More than the average No. of deaths.	December	146	17.22	13.41	36.76	84	2.43	1.52	10.16	3.88	4.05	11.0	29.141
	November.....	130	15.33	11.81	37.95	84	2.52	1.57	10.11	3.62	3.96	9.7	29.135
	October	108	12.74	16.98	44.59	73	2.76	1.73	9.95	3.54	3.29	8.8	29.228
Average		71	8.33	17.46	47.36	77	3.47	2.17	9.51	3.98	4.05	9.2	29.128
Less than the average No. of deaths.	September.....	69	8.14	20.59	61.36	74	4.82	3.01	8.87	3.97	3.70	9.1	29.131
	January.....	67	7.90	13.98	28.18	85	1.77	1.11	10.57	4.31	3.89	10.2	29.068
	March.....	62	7.31	16.74	35.83	77	2.13	1.33	10.35	3.95	4.15	9.4	29.089
	August.....	49	5.78	21.50	68.58	70	5.52	3.45	8.23	3.93	4.03	7.7	29.192
	February.....	49	5.78	17.32	18.57	88	1.34	0.82	10.86	4.15	4.29	10.7	29.177
	June.....	44	5.19	18.00	65.05	80	5.33	3.33	8.35	4.61	5.00	7.5	29.100
	July.....	43	5.07	21.20	70.69	75	6.19	3.87	7.81	3.80	3.97	6.9	29.104
	April.....	41	4.83	18.74	46.04	71	2.88	1.80	9.88	3.91	4.30	9.5	29.116
May.....		40	4.71	19.28	56.74	69	3.95	2.47	9.21	4.19	4.51	9.9	29.060

^a See foot-notes to Table 87.

^b Exceptions to the proposition that more than an average number of deaths from diphtheria occurred in months when the average daily temperature was less than the average, and *vice versa*.

^c Exceptions to the proposition that more than an average number of deaths from diphtheria occurred in months when less than the average quantity of vapor was inhaled, and *vice versa*.

Typhoid fever—In Table 89 the relation of deaths from typhoid fever to certain atmospheric conditions for 1889 are given. The autumn months, as usual, show much the largest number of deaths from this disease.

The number of deaths for 1889 caused by typhoid fever was 637, and for 1888 it was 638, showing that, notwithstanding the decrease in the total number of deaths, it has prevailed as much as usual.

TABLE 89.—Deaths returned in Michigan from typhoid fever, by months, during the year 1889, and some coincident meteorological conditions, at representative stations in Michigan during the same year and months.

Months in order by number of deaths from typhoid fever, greatest first.		Deaths from typhoid fever, 1889.		Temperature, degrees Fahr.		Humidity of atmosphere, etc.—Monthly averages.				Ozone, — relative maximum =10.		Average velocity of wind—miles per hour—by registering anemometers.	Average pressure of atmosphere. (Barometer re- duced to 32° Fahr.)
		Number.	Per cent of total.	Average daily range by registering thermometer.	Average of three daily observations.	Relative per cent of saturation.	Absolute grains of vapor in a cubic foot of air. ^a	Weight in Troy ounces of vapor in- haled by one person in 24 hours. ^a	Weight in Troy ounces of vapor ex- haled from air passages in 24 hours in excess of vapor inhaled. ^a	Day,—7 a. m. to 2 p. m.	Night,—9 p. m. to 7 a. m.		
Number of stations in- cluded in meteorologi- cal averages.....		*634	100.00	16	13	9	9	9	9	8	8	7	12
More than the Av. No. of deaths.	October	126	19.87	b 16.98	c 44.59	73 d	2.76	1.73	9.95	3.54	3.29	8.8	29.228
	November	98	15.46	b 11.81	c 37.95	84 d	2.52	1.57	10.11	3.62	3.86	9.7	29.135
	September	95	14.98	20.59	61.36	74	4.82	3.01	8.67	3.97	3.70	9.1	29.131
	August	67	10.57	21.50	68.58	70	5.52	3.45	8.23	3.93	4.03	7.7	29.192
	December	59	9.31	b 13.41	c 36.76	84 d	2.43	1.52	10.16	3.83	4.05	11.0	29.141
Average		58	8.33	17.46	47.36	77	3.47	2.17	9.51	3.98	4.05	9.2	29.128
Less than the average No. of deaths.	June	32	5.04	b 18.00	c 63.05	80 d	5.33	3.33	8.35	4.61	5.00	7.5	29.100
	January	30	4.73	13.93	28.18	85	1.77	1.11	10.57	4.31	e 3.89	10.2	29.068
	July	28	4.42	b 21.20	c 70.69	75 d	6.19	3.57	7.81	e 3.80	e 3.97	6.9	29.104
	March	27	4.26	16.74	35.83	77	2.13	1.33	10.35	e 3.95	4.15	9.4	29.028
	April	27	4.26	b 18.74	46.04	71	2.88	1.80	9.88	e 3.91	4.30	9.5	29.116
	February	26	4.10	17.32	18.57	88	1.84	.82	10.86	4.15	4.29	10.7	f 29.177
May		19	3.00	b 19.28	c 56.74	69 d	3.95	2.47	9.21	4.19	4.51	9.9	29.060

^a See foot-notes to Table 87.

^b Exceptions to the proposition that the average daily range of temperature was greater than the average in months when more than the average number of deaths occurred, and vice versa.

^c Exceptions to the proposition that the average daily temperature was greater than the average in months when more than the average number of deaths occurred, and vice versa.

^d Exceptions to the proposition that the absolute humidity was greater than the average in months when more than the average number of deaths occurred, and vice versa.

^e Exceptions to the proposition that the ozone was less than the average in months when more than the average number of deaths occurred, and vice versa.

^f Exceptions to the proposition that the atmospheric pressure indicated by the barometer was greater than the average in months when more than the average number of deaths occurred, and vice versa.

* Excluding 3 deaths in unknown month.

Diarrheal Diseases—In Table 90 may be seen the number of deaths from this cause for the years 1878 and 1889 inclusive. The number for each disease of the class and the total, with an average are given in the table. About 8 per cent of the total mortality was caused by the diseases herein considered.

TABLE 90.—*Deaths returned from diarrheal diseases in Michigan during the years 1878-1889, and the average.*

Years.	Diarrhea.	Dysentery.	Cholera Infantum.	Cholera morbus.	Enteritis.	Diarrheal diseases.
1878.....	173	158	243	27	214	815
1879.....	226	185	300	86	287	934
1880.....	310	180	499	64	267	1,300
1881.....	501	270	857	86	342	2,056
1882.....	259	96	428	50	276	1,109
1883.....	267	114	465	27	294	1,167
1884.....	409	160	781	50	350	1,750
1885.....	261	105	360	42	324	1,092
1886.....	378	158	658	42	327	1,553
1887.....	414	183	626	57	389	1,619
1888.....	371	153	767	52	390	1,733
1889.....	419	154	722	53	352	1,700
Average.....	332	154	558	49	308	1,408

Diarrhea—The number of deaths from this cause as returned for 1889, was 419, which does not include 31 cases of chronic diarrhea. This is an increase over the number returned for 1888 which was 371. As stated in a former table a very large percentage of the deaths was among children under five years of age, and being very equally divided as to sex of decedents. Table 91 gives the atmospheric conditions prevailing during the year.

TABLE 91.—Deaths returned in Michigan from diarrhea, by months, during the year 1889, and some coincident meteorological conditions.

Months in order by number of deaths from diarrhea, greatest first.	Deaths from diarrhea, 1888.		Temperature, degrees Fahr.		Humidity of atmosphere, etc., monthly averages.				Ozone,—rel- ative maxi- mum =10.		Average velocity of wind—miles per hour—by registering anemometers.	Average pressure of atmosphere, (Barometer re- duced to 32° Fahr.)
	Number.	Per cent of total.	Average daily range by registering thermometers.	Average of three daily observations.	Relative per cent of saturation.	Absolute grains of vapor in a cubic foot of air. ^a	Weight in Troy ounces of vapor in- haled by one person in 24 hours. ^a	Weight in Troy ounces of vapor ex- haled from air passages in 24 hours in excess of vapor inhaled. ^a	Day, —7 A. M. to 2 P. M.	Night, —9 P. M. to 7 A. M.		
Number of stations included in meteorological averages.	419	100.00	16	13	9	9	9	9	8	8	7	12
More than the Av. No. of deaths.												
August.....	134	31.98	21.50	68.58	70	5.52	3.45	8.23	3.93	4.08	7.7	29.192
July.....	107	25.54	21.20	70.69	75	6.19	3.87	7.81	3.80	3.97	6.9	29.104
September.....	92	21.96	20.59	61.36	74	4.82	3.01	8.67	3.97	3.70	9.1	29.131
Average.....	35	8.33	17.46	47.36	77	3.47	2.17	9.51	3.98	4.05	9.2	29.128
Less than the average number of deaths.												
June.....	27	6.44	b 18.00	c63.05	80	e 5.33	3.33	8.35	4.61	5.00	7.5	29.100
October.....	23	5.49	16.98	44.59	d 73	2.76	1.73	9.95	f 3.54	f 3.29	8.8	29.228
November.....	10	2.39	11.81	37.95	84	2.52	1.57	10.11	f 3.62	f 3.36	9.7	29.185
May.....	9	2.15	b 19.28	c56.74	d 69	e 3.95	2.47	9.21	4.19	4.51	9.9	29.060
April.....	7	1.67	b 18.74	46.04	d 71	2.88	1.80	9.88	f 3.91	4.30	9.5	29.116
March.....	4	.95	16.74	35.83	77	2.13	1.33	10.35	f 3.95	4.15	9.4	29.089
December.....	4	.95	13.41	36.76	84	2.43	1.52	10.16	f 3.83	4.05	11.0	29.141
January.....	1	.24	13.93	28.18	85	1.77	1.11	10.57	4.31	f 3.89	10.2	29.068
February.....	1	.24	17.32	18.57	88	1.34	.82	10.86	4.15	4.29	10.7	29.177

^a See foot-notes to Table 87, page 218.^b Exceptions to the proposition that *more* than the average number of deaths from diarrhea occurred in months when the average daily range of temperature was *greater* than the average, and *vice versa*.^c Exceptions to the proposition that *more* than the average number of deaths from diarrhea occurred in months when the average daily temperature was *higher* than the average, and *vice versa*.^d Exceptions to the proposition that *more* than the average number of deaths from diarrhea occurred in months when the relative humidity of the atmosphere was *less* than the average, and *vice versa*.^e Exceptions to the proposition that *more* than the average number of deaths from diarrhea occurred in months when the absolute humidity of the atmosphere was *greater* than the average, and *vice versa*.^f Exceptions to the proposition that *more* than the average number of deaths from diarrhea occurred in months when the amount of ozone in the atmosphere was *less* than the average, and *vice versa*.^g Exceptions to the proposition that *more* than the average number of Deaths from diarrhea occurred in months when the average daily pressure of the atmosphere was *greater* than the average, and *vice versa*.

Scarlet fever—The number of deaths from this disease for 1889 was considerably less than was returned for 1888, there being 240 for 1889 and 323 for 1888, but which was the most for any year since 1884.

As will be seen by the table the deaths are quite evenly distributed throughout the year. It was, as usual, most fatal among children under ten years of age. The ratio of deaths from scarlet fever to the total number of deaths was 1.18 per cent, while for 1888 it was 1.48 per cent.

TABLE 92.—Deaths returned in Michigan from scarlet fever, by months, during the year 1889, and some coincident meteorological conditions, at representative stations in Michigan during the same year and months.

Months in order by number of deaths from scarlet fever, greatest first.	Deaths from scarlet fever, 1889.		Temperature, degrees Fahr.		Humidity of atmosphere, etc., monthly averages.				Ozone,— relative maximum =10.		Average velocity of wind—miles per hour—by registering anemometer.	Average pressure of atmosphere, (Barometer reduced to 32° Fahr.)
	Number.	Per cent of total.	Average daily range by registering thermometers.	Average of three daily observations.	Relative per cent of saturation.	Absolute grains of vapor in a cubic foot of air, a	Weight in Troy ounces of vapor in- haled by one person in 24 hours, a	Weight in Troy ounces of vapor ex- haled from air passages in 24 hours in excess of vapor inhaled, a	Day,—7 a. m. to 2 p. m.	Night,—9 p. m. to 7 a. m.		
Number of stations in- cluded in meteorolo- gical averages.....	240	100.00	16	13	9	9	9	9	8	8	7	12
More than the av. No. of deaths												
May.....	27	11.25	19.28	b 56.74	69	c 3.95	2.47	9.21	4.19	4.51	9.9	29.060
January.....	25	10.41	18.93	28.18	85	1.77	1.11	10.57	4.31	3.89	10.2	29.068
December.....	25	10.41	18.41	36.76	84	2.43	1.52	10.16	3.83	4.05	11.0	29.141
March.....	22	9.16	16.74	35.83	77	2.13	1.33	10.35	3.95	4.15	9.4	29.089
Average.....	20	8.33	17.46	47.36	77	3.47	2.17	9.51	3.98	4.05	9.2	29.128
Less than the average No. of deaths.												
April.....	19	7.93	18.74	b 46.04	71	c 2.88	1.80	9.88	3.91	4.30	9.5	29.116
February.....	19	7.93	17.32	b 18.57	88	c 1.34	.82	10.86	4.15	4.29	10.7	29.177
September.....	18	7.50	20.59	61.36	74	4.82	3.01	8.67	3.97	3.70	9.1	29.131
October.....	18	7.50	16.98	b 44.59	73	c 2.76	1.73	9.95	3.54	3.29	8.8	29.228
November.....	18	7.50	11.81	b 37.95	84	c 2.52	1.57	10.11	3.62	3.36	9.7	29.135
July.....	18	7.50	21.20	70.69	75	6.19	3.87	7.81	3.80	3.97	6.9	29.104
June.....	16	6.66	18.00	63.05	60	5.33	3.33	8.85	4.61	5.00	7.5	29.100
August.....	15	6.25	21.50	68.58	70	5.52	3.45	8.23	3.98	4.03	7.7	29.102

^a See foot-notes to Table 87.

^b Exceptions to the proposition that the average daily temperature was lower than the average in months when more than the average number of deaths from scarlet fever occurred, and *vice versa*.

^c Exceptions to the proposition that the absolute humidity of the atmosphere was less than the average in months when more than the average number of deaths from scarlet fever occurred, and *vice versa*.

Consumption—This disease caused the deaths of 2,137 persons during the year 1889. For 1888 the number reported was 2,424. It is by far the most destructive of all causes of death in Michigan. Of the decedents for 1889 there were 987 males and 1,150 females. In-door occupation and sedentary lives probably account for this excess among the females. The period of age at which most deaths occurred was from 20 to 30. This has been true for every year for the last nineteen years. Table 93 and the exhibits preceding it give full information regarding this disease.

Mortality from consumption by months and quarters, 1889.

Months.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Unk.
	171	134	189	199	192	157	143	209	204	172	162	198	7
Quarters	494			548			556			532			7
Per cent	23.12			25.64			26.02			24.90			.83

Total mortality from consumption by sex, months, and age, 1869-1889.

	Sex.		Totals.	Months.												Unknown.*
	Males.	Females.		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	
Males.....	17,054			1,040	1,173	1,571	1,609	1,591	1,341	1,355	1,437	1,483	1,396	1,404	1,597	57
Females ..		19,771		1,196	1,356	1,700	1,814	1,801	1,577	1,606	1,715	1,823	1,673	1,613	1,821	76
Totals.....			36,825													
Quarters.....				8,036			9,733			9,419			9,504			133
Per cent.....				21.82			26.43			25.58			25.81			.36

	Ages.											Unknown.
	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 and over.	
Males.....	1,215	206	250	1,021	3,946	2,859	2,223	1,953	1,841	1,077	192	271
Females	1,164	231	592	2,320	5,753	3,518	2,117	1,543	1,302	793	156	232
Totals	2,379	437	842	3,341	9,699	6,377	4,340	3,496	3,143	1,870	348	553
Per cent.....	6.46	1.19	2.01	9.07	26.30	17.32	11.79	9.49	8.53	5.08	.94	1.50

Mortality from consumption by sex and age, 1889.

Ages.	Deaths from all causes.	Deaths from consumption.	Per cent at several ages.	Males.	Females.	Per cent of deaths from consumption to population.
Under 10	8,578	145	6.79	71	74	.083
10 to 20.....	1,219	256	11.98	72	184	.087
20 to 30.....	1,797	568	26.58	250	318	.161
30 to 40.....	1,457	412	19.23	174	238	.161
40 to 50.....	1,256	240	11.23	132	108	.131
50 to 60.....	1,312	187	8.75	115	72	.150
60 to 70.....	1,730	185	8.66	88	97	.250
70 to 80.....	1,719	105	4.91	66	39	.341
80 and over.....	968	15	.70	7	8	.195
Age not stated.....	284	24	1.12	12	12	1.648
Totals	20,315	2,187	100.00	987	1,150	.115

TABLE 93.—CONSUMPTION.—Deaths from consumption returned in Michigan, by months, during the year 1889, and some coincident meteorological conditions, at representative Stations in Michigan during the same year and months.

Months in order by number of deaths from con- sumption, greatest first.	Deaths from consump- tion, 1889.		Temperature, degrees Fahr.		Humidity of atmosphere, etc., monthly averages.				Ozone,—rela- tive maxi- mum =10.		Average velocity of wind—miles per hour—by registering anemometers.	Average pressure of atmosphere (barometer re- duced to 32° Fahr.)
	Number.	Per cent of total.	Average daily range by registering thermometers.	Average of three daily observations.	Relative per cent of saturation.	Absolute grains of vapor in a cubic foot of air, a	Weight in Troy ounces of vapor in- haled by one person in 24 hours, a	Weight in Troy ounces of vapor ex- haled from air passages in 24 hours in excess of vapor inhaled, a	Day,—7 A. M. to 2 P. M.	Night,—9 P. M to 7 A. M.		
No. stations included in } meteorological av'r'g's }	b2,130	100.00	16	13	9	9	9	9	8	8	7	12
More than the average No. of deaths.	August	209 9.81	21.50	68.58	70	5.52	3.45	8.23	3.98	4.08	7.7	29.192
	September.....	204 9.58	20.59	61.36	74	4.82	3.01	8.67	3.97	3.70	9.1	29.181
	April.....	199 9.34	18.74	c 46.04	71	2.88	d 1.80	9.88	3.91	4.30	9.5	29.116
	December.....	198 9.30	13.41	c 36.76	84	2.43	d 1.52	10.16	3.83	4.05	11.0	29.141
	May.....	192 9.01	19.28	56.74	69	3.95	2.47	9.21	4.19	4.51	9.9	29.060
	March.....	189 8.87	16.74	c 35.83	77	2.13	d 1.33	10.35	3.95	4.15	9.4	29.089
Average	178 8.33	17.46	47.36	77	3.47	2.17	9.51	3.98	4.05	9.2	29.128	
Less than the average No. of deaths.	October	172 8.08	16.98	44.59	73	2.76	1.73	9.95	3.54	3.29	8.8	29.228
	January.....	171 8.03	13.93	28.18	85	1.77	1.11	10.57	4.31	3.89	10.2	29.068
	November.....	162 7.61	11.81	37.95	84	2.52	1.57	10.11	3.62	3.36	9.7	29.135
	June	157 7.37	13.00	c 63.05	80	5.33	d 3.33	8.35	4.61	5.00	7.5	29.100
	July.....	143 6.71	21.20	c 70.69	75	6.19	d 3.87	7.81	3.80	3.97	6.9	29.104
	February.....	134 6.29	17.32	18.57	88	1.34	.82	10.86	4.15	4.29	10.7	29.177

a See foot-notes to Table 87.

b Excluding 7 deaths in unknown months.

c Exceptions to the proposition that the average daily temperature was *higher* than the average in months when *more* than the average number of deaths from consumption occurred, and *vice versa*.d Exceptions to the proposition that *more* than the average amount of vapor was inhaled in months in which there was *more* than the average number of deaths from consumption, and *vice versa*.

Pneumonia.—The following tables give certain facts concerning the mortality from pneumonia. There were 1,048 deaths from this disease for the year 1889. As will be seen by Table 94 it is most prevalent in the winter and early spring, and that its fatality is greatest among those of advanced age who cannot withstand its attacks.

Every year there are more deaths among males than among females, there being for 1889, 606 males and 442 females.

TABLE 94.—*By months, the number of deaths returned from pneumonia in Michigan during each of the years 1880-1889, and the average for ten years ending with 1889.*

Years.	Totals.	Deaths from pneumonia, 1880-1889.											
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
1880.....	812	56	82	111	113	79	37	29	36	51	44	68	105
1881.....	805	77	88	126	100	70	37	39	29	47	55	43	91
1882.....	785	59	65	84	82	94	58	29	29	36	43	57	97
1883.....	737	76	61	97	104	89	40	30	42	27	41	53	76
1884.....	767	68	101	106	83	67	39	34	42	34	30	70	90
1885.....	733	65	100	122	86	66	34	26	26	41	45	43	78
1886.....	783	57	62	113	100	63	48	32	28	36	46	76	121
1887.....	884	87	112	122	113	75	44	28	36	52	64	66	84
1888.....	1,190	96	153	181	143	128	74	36	37	68	68	74	113
1889.....	1,048	122	103	139	147	75	52	50	47	48	30	75	108
Average for 10 years..	849	76	93	120	107	81	46	33	35	44	52	62	96

TABLE 95.—Deaths returned from pneumonia in Michigan during the year 1889, and some coincident meteorological conditions at representative stations in Michigan during the same year and months.

Months in order by number of deaths from pneumonia, greatest first.	Deaths from pneumonia, 1889.		Temperature, degrees Fahr.		Humidity of atmosphere, etc., monthly averages.				Ozone,— relative maximum = 10.		per hour—by per hour—by registering anemometer.	(Barometer reduced to 32° Fahr.)	
	Number.	Per cent of total.	Average daily range by registering thermometers.	Average of three daily observations.	Relative per cent of saturation.	Absolute grains of vapor in a cubic foot of air, a	Weight in Troy ounces of vapor in- haled by one person in 24 hours, a	Weight in Troy ounces of vapor ex- haled from air passages in 24 hours in excess of vapor inhaled, a	Day,—7 a. m. to 2 p. m.	Night,—9 p. m. to 7 a. m.			
Number of stations in- cluded in meteorolo- gical averages.....	*1,046	100.00	16	13	9	9	9	9	8	8	7	12	
More than the av. No. of deaths.	April	147	14.05	18.74	46.04	71	2.88	1.80	9.88	3.91	4.30	9.5	29.116
	March	139	13.29	16.74	35.88	77	2.13	1.33	10.35	3.95	4.15	9.4	29.089
	January	122	11.66	13.93	28.18	85	1.77	1.11	10.57	4.31	3.89	10.2	29.065
	December	108	10.32	13.41	36.76	84	2.43	1.52	10.16	3.83	4.05	11.0	29.141
	February	103	9.86	17.32	18.57	88	1.34	.82	10.86	4.15	4.29	10.7	29.177
Average	87	8.33	17.46	47.36	77	3.47	2.17	9.51	3.98	4.05	9.2	29.128	
Less than the average No. of deaths.	October	80	7.65	16.98	b 44.59	73	2.76	c 1.73	9.95	3.54	3.29	8.8	29.228
	November	75	7.17	11.81	b 37.95	84	2.52	c 1.57	10.11	3.62	3.36	9.7	29.135
	May	75	7.17	19.28	56.74	69	3.95	2.47	9.21	4.19	4.51	9.9	29.060
	June	52	4.97	18.00	63.05	80	5.33	3.33	8.35	4.61	5.00	7.5	29.100
	July	50	4.78	21.20	70.69	75	6.19	3.87	7.81	3.80	3.97	6.9	29.104
	September	48	4.59	20.59	61.36	74	4.82	3.01	8.67	3.97	3.70	9.1	29.131
	August	47	4.49	21.50	68.58	70	5.52	3.45	8.23	3.93	4.03	7.7	29.192

^a See foot-notes to Table 87.

^b Exceptions to the proposition that the average daily temperature was *lower* than the average in months when *more* than the average number of deaths from pneumonia occurred, and *vice versa*.

^c Exceptions to the proposition that *less* than the average amount of vapor was inhaled in months when *more* than the average number of deaths from pneumonia occurred, and *vice versa*.

* Excluding 2 deaths in unknown month.

In Table 96 is given the relative prevalence in 1889 of consumption, pneumonia, typhoid fever, scarlet fever, and diarrhea for each of the eleven geographical divisions of the State. The proportion of each to the total number of deaths may be seen, and interesting comparisons made. The counties included in each division are given in Table 75.

TABLE 96.—*Exhibiting for the State and eleven geographical divisions, in 1889, the number and per cent of deaths returned from all causes, from consumption, pneumonia, typhoid fever, scarlet fever and diarrhea.*

State and geographical divisions.	Deaths from all causes, 1889.	Consumption.		Pneumonia.		Typhoid Fever.		Scarlet Fever.		Diarrhea.	
		Number of deaths.	Per cent to deaths from all causes.	Number of deaths.	Per cent to deaths from all causes.	Number of deaths.	Per cent to deaths from all causes.	Number of deaths.	Per cent to deaths from all causes.	Number of deaths.	Per cent to deaths from all causes.
State.....	20,315	2,173	10.70	1,130	5.56	638	3.14	240	1.18	450	2.22
Upper Peninsula	1,757	111	6.32	80	4.55	121	6.89	16	.91	58	3.30
Northwestern	539	38	7.05	86	6.68	21	3.90			14	2.60
Northern	418	54	12.92	15	3.59	16	3.83	5	1.20	9	2.15
Northeastern.....	386	25	6.48	26	6.74	4	1.04	9	2.33	12	3.11
Western.....	2,384	249	10.44	133	5.58	97	4.07	4	.17	70	2.93
Northern central.....	524	71	13.55	24	4.58	15	2.86	6	1.15	6	1.15
Eastern	2,996	299	9.98	162	5.41	95	3.17	39	1.30	65	2.17
Central	2,424	300	12.38	123	5.07	88	3.63	36	1.49	24	.99
Southwestern.....	1,098	150	13.66	74	6.74	27	2.46	6	.55	3	.27
Southern central.....	2,748	330	12.01	164	5.97	62	2.26	24	.87	12	.44
Southeastern.....	5,041	546	10.83	293	5.81	92	1.83	95	1.88	177	3.53

In Table 97 may be found the number of deaths from old age, those aged 70 and over and of those under five, for each of the geographical divisions of the State, during the year 1889. In 1888 there were 1,174 deaths from old age returned. The per cent of deaths to the population for each division is given. An examination of the table will show how the rate varies in the different sections.

TABLE 97.—*Exhibiting for the State and eleven geographical divisions, the number and per cent of deaths at all ages, from old age, of all aged 70 and over, and of all aged under 5, during the year 1889.*

State and geographical divisions.	Deaths at all ages,—1889.	Old age.		Aged 70 and over.		Aged under 5.	
		Number of deaths.	Per cent to deaths at all ages by geographical divisions.	Number of deaths.	Per cent to deaths at all ages by geographical divisions.	Number of deaths.	Per cent to deaths at all ages by geographical divisions.
State	20,315	965	4.75	2,682	13.20	7,664	37.73
Upper Peninsula	1,757	29	1.65	54	3.06	944	54.86
Northwestern	539	29	5.38	50	9.28	235	43.60
Northern	418	8	1.91	28	6.70	184	44.02
Northeastern	386	1	.26	9	2.33	202	52.33
Western	2,384	103	4.32	282	11.83	948	39.77
Northern central	524	16	3.05	52	9.92	212	40.46
Eastern	2,996	125	4.17	308	10.11	1,242	41.46
Central	2,424	153	63.12	491	20.25	652	26.90
Southwestern	1,098	66	60.11	215	10.47	295	26.87
Southern central	2,748	221	8.04	650	2.37	611	22.23
Southeastern	5,041	214	4.25	548	10.87	2,139	42.43

The average age of all who have died in the State for the years 1887, 1888, and 1889, with a ten years average, may be found in Table 98. The average age of total decedents was 28.55 for 1889, and 28.52 for 1888. The average age of males for 1889 was 30.44, and 28.80 for 1888. The average age of females for 1889 was 29.40, and for 1888 was 28.12. The average age of male decedents aged over 20 was 55.04 for 1888, the females for the same time and age was 52.41. For 1889 the averages were 52.70 and 45.85.

TABLE 98.—*Showing the average age of decedents in Michigan during the years 1887, 1888, 1889, and the average for ten years, 1879-1888.*

	Year ending,	Average age in years and 100ths of a year.			
		Totals.	Males.	Females	Excess of males.
Deaths as shown by registration returns.....	Dec. 31, 1887.....	29.10	29.07	28.04	1.03
Deaths of native born inhabitants as shown by registration returns.....		21.86	21.82	22.32	-.50
Deaths of foreign born inhabitants as shown by registration returns.....		49.74	50.23	49.12	1.11
Deaths from consumption, by registration returns.....		35.40	37.06	34.00	3.00
All aged 20 and over whose occupations were stated in registration returns of deaths.....		51.88	53.70	49.48	4.22
All who died aged 20 years and over as shown by registration returns.....		53.72	55.17	52.03	3.14
Deaths of native born inhabitants aged 20 years and over as shown by registration returns.....		52.52	55.22	50.82	4.40
Deaths of foreign born inhabitants aged 20 years and over as shown by registration returns.....		54.27	54.21	54.38	-.17
Deaths as shown by registration returns.....	Dec. 31, 1888.....	28.52	28.80	28.12	.68
Deaths of native born inhabitants as shown by registration returns.....		21.83	21.70	22.11	-.41
Deaths of foreign born inhabitants as shown by registration returns.....		50.49	50.80	50.11	.69
Deaths from consumption, by registration returns.....		35.55	37.73	38.79	3.94
All aged 20 and over whose occupations were stated in registration returns of deaths.....		52.15	53.80	50.01	3.79
All who died aged 20 years and over as shown by registration returns.....		54.29	55.92	52.41	3.51
Deaths of native born inhabitants aged 20 years and over as shown by registration returns.....		52.92	55.04	50.95	4.09
Deaths of foreign born inhabitants aged 20 years and over as shown by registration returns.....		54.96	55.27	54.58	.69
Deaths as shown by registration returns.....	Dec. 31, 1889.....	28.55	30.44	29.40	1.04
Deaths of native born inhabitants as shown by registration returns.....		25.20	23.25	22.11	1.14
Deaths of foreign born inhabitants as shown by registration returns.....		50.88	49.90	55.04	-5.14
Deaths from consumption by registration returns.....		35.08	36.70	30.35	6.35
All aged 20 years and over whose occupations were stated in registration returns of deaths.....		53.79	51.05	56.12	-5.07
All who died aged 20 years and over as shown by registration returns.....		51.77	52.70	45.85	6.85
Deaths of native born inhabitants aged 20 years and over as shown by registration returns.....		59.12	54.21	50.16	4.05
Deaths of foreign born inhabitants aged 20 years and over as shown by registration returns.....		54.66	53.29	59.14	-5.85
Deaths as shown by registration returns.....	Average for 10 years, 1879-1888.....	26.82	37.34	26.29	11.05
Deaths of native born inhabitants as shown by registration returns.....		20.77	20.80	20.90	-.10
Deaths of foreign born inhabitants as shown by registration returns.....		48.53	49.08	47.27	1.81
Deaths from consumption, by registration returns.....		35.80	31.18	33.74	-2.56
All aged 20 years and over whose occupations were stated in registration returns of deaths.....		52.90	54.27	49.92	4.35
All who died aged 20 years and over as shown by registration returns.....		47.78	54.45	50.99	3.46
Deaths of native born inhabitants aged 20 years and over as shown by registration returns.....		51.69	54.22	50.45	4.77
Deaths of foreign born inhabitants aged 20 years and over as shown by registration returns.....		53.92	54.01	53.18	.83

LONGEVITY OF DECEDENTS.

Table 99 gives a total of all decedents aged over 20, classed by occupations, who have died in this State for the last 20 years.

No definite conclusion can be drawn from the age attained by any single individual, but when a sufficient number engaged in any one occupation can be taken collectively, they form a good basis for an average estimate of longevity or expectation of life.

The table is divided into twelve general classes, and under each class are included the various trades and professions to which each belongs.

It is hoped that the facts here given will be put to some good use in throwing some light upon the comparative healthfulness of different pursuits. If the number and average age of the living among these various classes were known, it would add greatly to the value of these statistics.

In the following sub-divisions of the classes, those occupations are selected which have the highest and lowest average age. In these exhibits, care is taken to select such examples only as have cases enough to form some reasonable basis for estimates.

No.	Males.	Av. age.	No.	Females.	Av. age.
53	Retired farmers.....	69.99	117	Weavers.....	68.62
93	Retired.....	72.78	34	Physicians.....	58.98
21	Weavers.....	73.00	93	Nurses.....	58.49
52	Spinners.....	71.44	29	Boarding house keepers.....	56.37
21	Basket makers.....	67.16	2,634	Farmers.....	56.10
388	Clergymen.....	64.14	149	Tailoresses.....	52.86
14	Surveyors.....	64.29	61	Merchants.....	52.00
101	Capitalists.....	64.60	14	Basket makers.....	49.84

No.	Males.	Av. age.	No.	Females.	Av. age.
171	Brakemen.....	28.04	33	Students.....	21.65
100	Students.....	23.83	47	Farmers' daughters.....	25.95
14	Rivermen.....	29.50	24	Prostitutes.....	26.31
67	Telegraphers.....	32.17	86	Clerks.....	29.59
73	Woodsmen.....	35.63	593	Teachers.....	31.17
172	Cigar-makers.....	35.47	385	Dress-makers.....	34.04
171	Printers.....	36.19	19	Hair dressers.....	35.13
787	Clerks.....	33.77	25	Musicians.....	34.78
24	Upholsterers.....	38.71	18	Artists.....	36.96
15	Well diggers.....	38.86	1,108	Domestics.....	36.84
1,309	Miners.....	37.76	171	Milliners.....	38.62
29	Finishers.....	34.46	36	Cooks.....	40.18
124	Farm laborers.....	37.18	13	Agents.....	38.73

TABLE 99.—*Exhibiting by classified occupations, the number, aggregate, and average age of decedents in Michigan, aged 20 years and over for the 20 years, 1870-1889; one-half year added to age of each for months and years excluded.*

Class.	Occupations,—20 years, 1870-1889.	Number of persons.	Age in years and hundredths of a year.	
			Aggregate.	Average.
	All aged 20 years and over	131,314	6,922,075.50	52.71
	All specified occupations—aged 20 years and over	122,628	6,467,382.00	52.74
	Occupations unspecified—aged 20 years and over	8,686	454,743.50	52.35
I.	Cultivators of the earth	32,972	1,994,696.50	59.59
II.	Active mechanics abroad	3,674	195,795.50	53.29
III.	Active mechanics in shops	4,669	238,961.50	51.18
IV.	Inactive mechanics in shops	2,238	117,373.00	52.45
V.	Laborers, no specified trades	11,963	531,795.50	44.49
VI.	Agents, laborers abroad, etc.	2,628	115,072.50	43.79
VII.	Seafaring men	841	35,683.00	42.43
VIII.	Soldiers	64	3,263.00	51.06
IX.	Business men	5,323	256,790.00	49.18
X.	Professional men	2,276	116,395.00	51.14
XI.	Unemployed	6,744	373,995.00	55.46
XII.	Females	57,982	2,972,250.00	51.31
I.	Cultivators of the earth	32,972	1,994,696.50	59.59
	Farmers	32,498	1,939,106.50	59.66
	Farm laborers	124	4,610.00	37.18
	Fruit growers	12	640.00	53.33
	Gardeners	272	15,964.00	58.69
	Nurserymen	13	666.50	51.26
	Retired farmers	53	3,709.50	69.99
II.	Active mechanics abroad	3,674	195,795.50	53.29
	Brick makers	87	2,011.50	54.36
	Carpenters and builders	2,658	140,814.00	52.97
	House-movers	9	510.50	56.72
	Masons	699	37,314.50	53.38
	Millwrights	112	7,064.50	63.08
	Pavers	1	21.50	21.50
	Ship-carpenters	65	3,401.50	52.33
	Stone cutters	93	4,657.50	50.08
III.	Active mechanics in shops	4,669	238,961.50	51.18
	Bakers	131	6,786.50	51.74

DECEDENTS—AVERAGE AGE BY OCCUPATIONS.

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TABLE 99.—CONTINUED.—*Occupation of decedents, etc.*

Class.	Occupations,—20 years, 1870-1889.	Number of persons.	Age in years and hundredths of a year.	
			Aggregate.	Average.
III.	Active mechanics in shops.— <i>Continued.</i>			
	Blacksmiths.....	845	47,279.50	55.96
	Boiler-makers.....	40	1,687.00	42.17
	Book-binders.....	14	688.00	49.14
	Bottlers.....	4	114.00	28.50
	Brewers.....	117	5,582.50	47.71
	Broom-makers.....	12	588.00	48.58
	Cabinet-makers.....	197	10,421.50	52.90
	Carriage-makers.....	156	8,915.50	57.15
	Carriage-trimmers.....	15	668.50	44.57
	Chair-makers.....	3	186.00	45.38
	Confectioners.....	21	1,027.00	48.90
	Cooks.....	66	3,107.50	47.08
	Coopers.....	421	24,216.00	57.52
	Coppersmiths.....	10	595.00	59.50
	Dyers.....	17	838.50	49.32
	Finishers.....	29	999.50	34.46
	Foundrymen.....	17	772.00	45.41
	Gilders.....	8	260.00	32.50
	Glass-blowers.....	7	258.00	36.85
	Gunsmiths.....	53	3,095.50	58.41
	Machinists.....	306	15,152.50	49.51
	Marble workers.....	37	1,747.50	47.22
	Mechanics.....	519	26,124.50	50.33
	Millers.....	322	17,984.50	55.89
	Model-makers.....	21	1,104.50	52.60
	Molders.....	208	8,142.50	39.14
	Painters.....	554	24,182.00	43.56
	Plasterers.....	21	1,135.50	53.98
	Plumbers.....	36	1,488.50	41.34
	Potters.....	6	418.00	69.67
	Rope-makers.....	5	291.50	58.30
	Sail-makers.....	5	236.00	47.20
	Saw-makers.....	5	235.50	47.10
	Sawyers.....	20	782.50	39.12
	Smelters.....	4	144.00	36.10
	Spinners.....	52	3,715.00	71.44
	Stove mounters.....	21	768.00	36.57

TABLE 99.—CONTINUED.—*Occupations of decedents, etc.*

Class.	Occupations,—20 years, 1870-1889.	Number of persons.	Age in years and hundredths of a year.	
			Aggregate.	Average.
III.	Active mechanics in shops.— <i>Continued</i> :			
	Tanners.....	40	2,192.50	54.81
	Tinners.....	107	4,615.00	43.13
	Turners.....	31	1,490.50	48.08
	Unclassified.....	29	1,241.50	42.81
	Upholsterers.....	24	929.00	38.71
	Wagon-makers.....	81	4,879.50	60.24
	Weavers.....	21	1,583.00	73.00
	Wood-carvers.....	11	497.00	45.18
IV.	Inactive mechanics, in shops.....	2,238	117,373.00	52.45
	Barbers.....	193	7,540.00	39.07
	Basket-makers.....	21	1,410.50	67.16
	Cigar-makers.....	172	6,101.50	35.47
	Furriers.....	2	114.50	57.00
	Harness-makers.....	186	8,986.00	48.04
	Hatters.....	20	1,099.00	54.95
	Jewelers.....	127	6,272.50	49.38
	Lithographers.....	6	160.00	26.67
	Printers.....	171	6,188.50	36.19
	Shoe-makers.....	851	51,573.00	60.60
	Silversmiths.....	7	396.50	56.64
	Tailors.....	482	27,581.00	57.22
V.	Laborers—No special trades.....	11,953	531,795.50	44.49
	Choppers.....	8	235.00	35.63
	Ditchers.....	10	621.00	62.10
	Janitors.....	42	2,460.50	58.53
	Laborers.....	10,046	456,986.50	45.48
	Loggers.....	29	961.50	33.16
	Mill-hands.....	181	7,317.50	40.42
	Miners.....	1,309	49,440.00	37.76
	Miscellaneous.....	164	7,591.50	46.23
	Porters.....	20	881.00	41.55
	Rivermen.....	14	413.00	29.50
	Salt-packers.....	4	222.00	55.50
	Servants.....	38	1,482.00	39.00
	Well-diggers.....	15	533.00	38.36
	Woodsmen.....	73	2,601.00	35.63

TABLE 99.—CONTINUED.—*Occupations of decedents, etc.*

Class.	Occupations,—20 years, 1870-1889.	Number of persons.	Age in years and hundredths of a year.	
			Aggregate.	Average.
VI.	Agents, laborers abroad, etc.....	2,628	115,072.50	43.79
	Agents	177	8,070.50	45.59
	Baggagemen	28	1,122.00	40.07
	Brakemen	171	4,880.50	28.04
	Butchers	316	14,862.50	47.03
	Collectors	10	492.50	49.25
	Commercial travelers	72	3,086.50	42.86
	Conductors	71	2,743.50	38.71
	Constables	14	667.00	47.64
	Draymen	98	5,180.50	52.65
	Drovers	57	2,824.50	49.72
	Engineers	112	4,972.50	44.39
	Expresmen	11	517.50	47.05
	Firemen	29	1,046.50	36.09
	Hackmen	52	2,300.50	44.24
	Hostlers	28	1,058.50	46.02
	Hunters and trappers	45	2,389.00	53.09
	Indian chief	1	104.50	104.50
	Inspectors of oil, gas, salt, etc.	8	345.00	43.13
	Jockeys	5	191.50	38.30
	Mail carriers	7	367.00	52.42
	Milk peddlers	22	1,203.00	54.68
	Overseers and superintendents	59	2,903.50	49.21
	Peddlers	181	9,339.50	51.59
	Policemen	34	1,391.00	40.91
	Railroad engineers	325	13,284.50	40.88
	Railroad expressmen	12	544.00	45.33
	Railroad firemen	56	1,204.00	21.50
	Railroad laborers	162	6,957.00	42.94
	Railroad men	103	4,307.50	41.82
	Sextons	9	509.50	56.61
	Station agents	9	314.00	34.88
	Switchmen	30	1,005.00	33.50
	Teamsters	262	11,944.50	45.53
	Toll-gate keepers	5	302.50	60.50
	Waiters	10	359.50	35.95
	Watchmen	32	1,671.50	52.23
	White-washers	10	634.50	63.45

TABLE 99.—CONTINUED.—*Occupations of decedents, etc.*

Class.	Occupations,—20 years, 1870-1889.	Number of Persons.	Age in years and hundredths of a year.	
			Aggregate.	Average.
VII.	Seafaring men	841	35,683.00	42.43
	Fishermen	146	6,870.00	47.05
	Officers	60	2,973.50	49.55
	Sailors	680	25,549.00	40.55
	United States Navy.....	5	290.50	58.10
VIII.	Soldiers	64	3,288.00	51.06
	Officers	7	376.50	53.79
	Soldiers.....	57	2,891.50	50.72
IX.	Business men	5,323	256,790.00	49.18
	Auctioneers.....	7	402.50	57.50
	Bankers.....	112	6,580.50	58.75
	Book-keepers.....	269	12,194.50	45.33
	Capitalists.....	101	6,525.00	64.60
	Clerks	787	26,576.50	33.77
	Commission merchants.....	25	1,440.50	57.62
	Contractors and jobbers.....	84	4,895.50	58.28
	Furniture dealers.....	11	554.50	48.59
	Grain buyers.....	23	1,116.50	48.54
	Grocers.....	243	11,979.50	49.29
	Hotel clerks.....	7	258.50	36.93
	Hotel keepers.....	341	17,935.50	52.58
	Insurance agents.....	84	4,479.00	53.32
	Justices of the peace.....	46	2,494.50	54.23
	Liquor dealers.....	22	1,024.00	46.55
	Liverymen.....	82	3,747.00	45.69
	Lumbermen.....	535	24,880.50	46.50
	Manufacturers.....	197	10,351.00	52.54
	Merchants.....	1,419	74,599.00	52.57
	Mill owners.....	9	505.50	56.17
	News agents.....	11	438.50	39.86
	Public officers.....	155	8,064.50	52.03
	Real estate dealers.....	97	5,958.00	61.42
	Restaurant keepers.....	25	1,202.50	48.10
	Salesmen.....	85	3,739.00	43.98
	Saloon keepers.....	488	21,189.00	43.87
	Undertakers.....	24	1,321.00	55.04
	All others.....	39	2,857.50	60.45

DECEDENTS—AVERAGE AGE BY OCCUPATIONS.

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TABLE 99.—CONTINUED.—*Occupations of decedents, etc.*

Class.	Occupations,—20 years, 1870-1889.	Number of persons.	Age in years and hundredths of a year.	
			Aggregate.	Average.
X.	Professional men.....	2,276	116,395.00	51.14
	Actors.....	12	515.50	42.95
	Architects.....	15	689.50	45.96
	Artists.....	37	1,594.00	43.08
	Attorneys-at-law.....	327	17,381.00	53.15
	Civil engineers.....	41	2,394.00	58.89
	Clergymen.....	388	24,886.50	64.14
	Dentists.....	58	2,593.00	44.70
	Draughtsmen.....	4	299.00	74.75
	Druggists.....	162	7,246.00	44.73
	Editors.....	47	2,100.50	44.69
	Electricians.....	2	66.00	33.00
	Judges.....	4	222.00	55.50
	Lecturers.....	2	100.00	50.00
	Musicians.....	60	2,698.00	44.88
	Opticians.....	3	132.50	44.17
	Photographers.....	27	1,008.00	37.15
	Physicians and surgeons.....	603	38,818.00	56.08
	Stenographers.....	2	67.50	33.75
	Students.....	100	2,384.00	23.83
	Surveyors.....	14	900.00	64.29
	Teachers.....	267	11,206.50	41.97
	Telegraphers.....	67	2,156.00	32.17
	Veterinary surgeons.....	34	1,948.50	57.80
XI.	Unemployed.....	6,744	373,995.00	55.46
	Faupers.....	245	14,550.00	59.38
	Pensioners.....	8	589.00	71.13
	Retired.....	93	6,786.50	72.73
	Unemployed.....	2,207	132,610.00	60.08
	Unknown.....	4,172	218,741.00	52.43
	All others.....	19	738.50	38.87
XII.	Females.....	57,932	2,972,250.00	51.31
	Actresses.....	4	127.00	31.75
	Agents.....	13	503.50	38.73
	Artists.....	18	665.50	36.96
	At home.....	377	11,481.50	30.32
	Basket makers.....	14	698.00	49.84

TABLE 99.—CONTINUED.—*Occupations of decedents, etc.*

Class.	Occupations,—20 years, 1870-1889.	Number of persons.	Age in years and hundredths of a year.	
			Aggregate.	Average.
XII.	<i>Females.—Continued:</i>			
	Boarding house keepers.....	29	1,635.00	56.37
	Book-keepers.....	8	308.50	37.93
	Cigarmakers.....	6	166.00	27.67
	Clerks.....	86	2,545.00	29.59
	Confectioners.....	6	259.00	43.17
	Cooks.....	36	1,446.50	40.18
	Domestics.....	1,108	41,821.00	36.84
	Dressmakers.....	385	13,108.50	34.04
	Druggists.....	3	154.50	51.50
	Factory employes.....	9	239.50	26.61
	Farmers.....	2,634	147,759.00	56.10
	Farmers' daughters.....	47	1,220.00	25.95
	Farmers' wives.....	355	46,590.50	54.42
	Hair dressers.....	19	667.50	35.18
	Hotel-keepers.....	54	2,501.00	46.31
	House-keepers.....	12,940	702,061.50	54.25
	Housewives.....	25,731	1,225,884.50	47.64
	Houseworkers.....	1,282	59,813.50	46.26
	Laborers.....	239	11,712.50	49.01
	Laundresses.....	10	418.00	41.80
	Manufacturers.....	9	470.50	52.28
	Matrons.....	95	4,983.50	52.45
	Merchants.....	61	3,172.00	52.00
	Millers.....	8	424.00	53.00
	Milliners.....	171	65,008.00	38.02
	Ministers.....	5	290.50	58.10
	Miscellaneous.....	160	7,428.00	46.42
	Musicians.....	25	869.50	34.78
	Nurses.....	93	5,440.00	58.49
	Paupers.....	101	5,836.50	57.79
	Physicians.....	34	2,005.50	58.98
	Prostitutes.....	24	631.50	26.31
	Saloon-keepers.....	11	543.00	49.36
	Seamstresses.....	263	10,576.50	40.21
	Spinsters.....	11	628.50	57.14
	Stenographers.....	2	50.00	25.00
	Students.....	33	714.50	21.65

TABLE 99.—CONTINUED.—*Occupations of decedents, etc.*

Class.	Occupations,—20 years, 1870-1889.	Number of Persons.	Age in years and hundredths of a year.	
			Aggregate.	Average.
XII.	Females.— <i>Continued.</i>			
	Tailoresses.....	149	7,877.50	52.86
	Teachers.....	593	18,481.00	31.17
	Telegraphers.....	8	195.50	24.43
	Unemployed.....	5,450	315,254.50	57.84
	Unknown.....	4,514	286,002.50	52.28
	Washerwomen.....	69	3,194.00	46.29
	Weavers.....	117	8,028.50	68.62
	Widows.....	13	957.50	73.65

LAWS OF MICHIGAN

CONCERNING THE

REQUIRING OF A CIVIL LICENSE TO MARRY,

THE SOLEMNIZATION OF MARRIAGES, AND THE RECORD, RETURN,
AND COMPILATION OF BIRTHS, MARRIAGES, AND DEATHS;
WITH SUGGESTIONS TO PERSONS AUTHORIZED TO
SOLEMNIZE MARRIAGES.

CHAPTER 236, HOWELL'S ANNOTATED STATUTES, 1882.

MARRIAGE AND THE SOLEMNIZATION THEREOF.

SECTION.

6209. Who shall be capable of contracting Marriage.

6210. Marriage is a civil contract.

6211. Who shall not intermarry.

6212. 6213. 6214. Who not to marry.

SECTION.

6215. Marriage, by whom solemnized.

6217. No particular form required.

6220. Marriages not void in certain cases.

6221. Marriages among Quakers, etc.

Chapter eighty-three of Revised Statutes of 1846, with amendments. *

(6209.) SECTION 1. Every male who shall have attained the full age of eighteen years, and every female who shall have attained the full age of sixteen years, shall be capable in law of contracting marriage, if otherwise competent.

(6210.) SEC. 2. Marriage, as far as its validity in law is concerned, is a civil contract to which the consent of parties capable in law of contracting is essential.

(6211.) SEC. 3. No man shall marry his mother, grandmother, daughter granddaughter, stepmother, grandfather's wife, son's wife, grandson's wife

* For prior Statutes relative to the solemnization of marriages, see Woodward Code, p. 42; Cass Code, p. 111; Code of 1820, p. 259; Rev. of 1827, p. 280; Laws of 1832, p. 6; Rev. of 1838, p. 329; R. S. of 1838, p. 333.

wife's mother, wife's grandmother, wife's daughter, wife's granddaughter, nor his sister, brother's daughter, sister's daughter, father's sister, or mother's sister.

(6212.) SEC. 4. No woman shall marry her father, grandfather, son, grandson, stepfather, grandmother's husband, daughter's husband, granddaughter's husband, husband's father, husband's grandfather, husband's son, husband's grandson, nor her brother, brother's son, sister's son, father's brother, or mother's brother.

(6213.) SEC. 5. No marriage shall be contracted whilst either of the parties has a former wife or husband living, unless the marriage with such former wife or husband shall have been dissolved.^b

(6214.) SEC. 6. No insane person or idiot shall be capable of contracting marriage. All marriages heretofore contracted between white persons and those wholly or in part of African descent are hereby declared valid and effectual in law for all purposes, and the issue of such marriages shall be deemed and taken legitimate as to such issue and as to both of the parents.

(6215.) SEC. 7. Marriages may be solemnized by any justice of the peace in the county in which he was chosen, and they may be solemnized throughout the State by any minister of the gospel who has been ordained according to the usages of his denomination, and who is a pastor of any church or churches in this State, or who shall continue to preach the gospel in this State: (*Provided.*)*

(6216.) SEC. 8.*

(6217.) SEC. 9. In the solemnization of marriage, no particular form shall be required, except that the parties shall solemnly declare, in the presence of the magistrate or minister and the attending witnesses, that they take each other as husband and wife; and in every case there shall be at least two witnesses, besides the minister or magistrate, present at the ceremony.

SEC. 10.† SEC. 11.† SEC. 12.† SEC. 13.† SEC. 14.*

(6220.) SEC. 16. No marriage solemnized before any person professing to be a justice of the peace or a minister of the gospel, shall be deemed or adjudged to be void, nor shall the validity thereof be in any way affected on account of any want of jurisdiction or authority in such supposed justice or minister: *Provided*, The marriage be consummated with a full belief on the part of the persons so married, or either of them, that they have been lawfully joined in marriage.

(6221.) SEC. 17. The preceding provisions of this chapter, so far as they relate to the manner of solemnizing marriages, shall not affect marriages among the people called Friends or Quakers; nor marriages among people of any other particular denomination having, as such, any peculiar mode of solemnizing marriages; but such marriages may be solemnized in the manner heretofore used and practiced in their respective societies or denominations.

^b Act 137, Laws of 1887, prohibits divorced persons from re-marrying for a period specified in the decrees, not to exceed two years.

*Repealed by Act 128, Laws of 1887.

†Repealed by Act 194, Laws of 1867, p. 266, Sec. 10.

ACT NO. 128, LAWS OF 1887.

FOR THE REQUIRING OF A CIVIL LICENSE IN ORDER TO MARRY, AND THE DUE REGISTRATION OF THE SAME, AND TO PROVIDE A PENALTY FOR THE VIOLATION OF THE PROVISIONS OF THE SAME.*

Persons intend-
ing marriage
must obtain
license from
county clerk.

SECTION 1. *The People of the State of Michigan enact,* It shall be necessary for all parties, intending to be married, to obtain a marriage license from the county clerk of the county in which either the man or woman resides, and to deliver the said license to the clergyman or magistrate who is to officiate, before the marriage can be performed.*

Secretary of
State to furnish
forms, blanks,
etc.

SEC. 2. Blank forms for marriage license and certificate, as also proper books of registration ruled for the items contained in said forms shall be prepared by the Secretary of State, and shall be furnished by him to the county clerk of the various counties of the State in quantities needed. The blank forms for license and certificate shall be made in duplicate and shall provide spaces for the entry of the following items, to wit: The full name, age, color, place of residence, place of birth, occupation, and if known, the father's name, and mother's maiden name, of each of the parties to be married; the number of times either of the parties may have been previously married; the bride's maiden name, in case she is a widow; the date of the giving of the license; the signature of the county clerk; the date and place of the marriage; the names and residences of two witnesses to the marriage, and the certification of the officiating clergyman or magistrate, that the marriage contemplated by the license has been performed by him. And the Secretary of the State shall furnish to the county clerks of the various counties of the State, blank forms of affidavit, containing the requisite allegations, under the laws of this State, of the competency of the parties to unite in the bonds of matrimony, and any party applying for license to marry, shall cause such an affidavit to be made and filed with the county clerk, as a basis for the issuing of the license; and such affidavit, together with the license, shall be made a matter of record of said clerk's office.

Form of license,

Secretary of
State to furnish
to county clerks
blank forms of
affidavits, etc.

Duty of county
clerk.

SEC. 3. It shall be the duty of the county clerk, on application being made to him, to fill out the blank spaces of the license according to the sworn answer of the applicant

*This act went into effect Sept. 27, 1887.

*Amended by Act No. 256, Laws of 1889, which see on the following page for amended provisions.

taken before him or some person duly authorized by law to administer oaths. If it shall appear that the parties are legally entitled to be married, the county clerk shall sign the license in certification of the fact that it is properly issued, and he shall make a correct copy thereof in the books of registration. For his services connected therewith he shall be entitled to a fee of fifty cents, to be paid by the party applying and at the time of the issuing of the license. He shall give the license, thus filled out and signed by him, together with the blank form of certificate, to the party applying for delivery to the clergyman or magistrate who is to officiate at the marriage. On the return of the license to the county clerk (as specified in section four, below), with the certificate of the clergyman, or magistrate, that the marriage has been performed, he shall record in the book of registration, in their proper places of entry, the date and place of the marriage, the names and residences of two witnesses to the marriage, and the name of the officiating clergyman or magistrate. All licenses and certificates so issued and returned shall be preserved on file in the office of the county clerk, and he shall, as often as once in three months, make a faithful report to the Secretary of State of all licenses and certificates issued and received by him.

Fees.

Licenses and certificates, where filed, etc.

SEC. 4. It shall be the duty of the clergyman or magistrate, officiating at a marriage to fill out the spaces of the certificate left blank for the entry of the time and place of the marriage, the names and residences of two witnesses, and his own signature in certification that the marriage has been performed by him. He shall separate the duplicate license and certificate and retain one-half for his own record, and he shall return the other half within ten days to the county clerk issuing the same.

Duty of officiating clergyman or magistrate.

SEC. 5. Any county clerk who shall refuse to give a license to persons properly applying and legally entitled to be married, or who shall violate any of the provisions of this act, shall be adjudged guilty of a misdemeanor, and shall be punished by a fine of not less than twenty-five dollars or more than one hundred dollars, or in default of payment thereof by imprisonment in the county jail for a term of thirty days.

Penalty for violating act by county clerk.

SEC. 6. Any clergyman or magistrate who shall join together in marriage parties who have not delivered to him a properly issued license, as provided for in this act, or who shall violate any of the provisions of this act, shall be adjudged guilty of a misdemeanor, and shall be punished by a fine of one hundred dollars, or, in default of payment thereof, by imprisonment in the county jail for a term of ninety days.

Penalty for violation, by clergyman, etc.

SEC. 7. Any person whose duty it shall be to return a marriage certificate to the county clerk, who shall neglect to return said certificate, shall be adjudged guilty of a misdemeanor, and shall be punished by a fine of not exceeding

Penalty for neglect to return certificate.

one hundred dollars or ninety days' imprisonment, or both in the discretion of the court.

False swearing
in application,
perjury.

SEC. 8. Any person applying for a marriage license who shall swear to a false statement therein, shall be guilty of perjury and shall be prosecuted therefor under the general laws of the State.

Filing and re-
cording of
reports.

SEC. 9. All reports of marriage, sent by the county clerks of the various counties of the State to the office of the Secretary of State, shall be preserved on file in that office, and a proper record thereof shall be made and kept.

Records of
license, etc.,
prima facie
evidence.

SEC. 10. The record of any license to marry, or of any marriage certificate in any county clerk's office, or a certified copy thereof, shall be *prima facie* evidence in any court or proceedings in this State, with the same force and effect as if the original were produced, both as to the facts therein contained and as to the genuineness of the signatures thereto.

Acts repealed.

SEC. 11. All other acts and parts of acts which are inconsistent herewith are hereby repealed.

ACT NO. 256 LAWS OF 1889.

AN ACT to amend section one of act number one hundred and twenty-eight, of the laws of eighteen hundred and eighty-seven, being an act entitled "An act for the requiring of a civil license in order to marry, and the due registration of the same, and to provide a penalty for the violation of the provisions of the same," and to extend the provisions of said act to non-residents of this State.

SECTION 1. *The People of the State of Michigan enact,* Section amended.
That section one of act number one hundred and twenty-eight of the session laws of eighteen hundred and eighty-seven, being an act entitled "An act for the requiring of a civil license in order to marry, and the due registration of the same, and to provide a penalty for the violation of the provisions of the same," approved May thirty-first, eighteen hundred and eighty-seven, be and the same is hereby amended so as to read as follows:

SECTION 1. *The People of the State of Michigan enact,* Persons intending marriage must obtain license.
It shall be necessary for all parties intending to be married to obtain a marriage license from the county clerk of the county in which either the man or woman resides, and to deliver the said license to the clergyman or magistrate who is to officiate, before the marriage can be performed. Where non-residents must obtain license.
If both parties to be married are non-residents of the State it shall be necessary to obtain such license from the county clerk of the county in which the marriage is to be performed.

This act is ordered to take immediate effect.

Approved July 3, 1889.

CHAP. 23, HOWELL'S ANNOTATED STATUTES, 1882.

AN ACT TO PROVIDE FOR THE REGISTRATION OF BIRTHS,
MARRIAGES AND DEATHS, BEING ACT NO. 194 OF 1867, AS
AMENDED BY ACT NO. 125 OF 1869.*

Duties of super-
visors and assess-
ors.

In 1869 returns
to be made
from April 5 to
Dec. 31, 1868.

Return to county
clerk.

In 1870 and
thereafter.

Returns to in-
clude from Jan-
uary to Decem-
ber last preced-
ing.

Statistics, how
obtained.

Compensation.

Proviso relative
to the city of
Detroit.

Duty of common
council.

Persons to be
appointed by.

Compensation
of persons so
appointed.

(858.) SECTION 1. *The People of the State of Michigan enact*, That it shall be the duty of the supervisor of each town-ship, and the supervisor or assessor of any city or ward therein, in this State, between the tenth day of April and the first day of June, in the year eighteen hundred and sixty-nine, to ascertain, by actual inquiry or otherwise, of the inhabitants thereof, the births and deaths which have occurred in their respective townships, cities, or wards, from and including April fifth, eighteen hundred and sixty-eight, to and including December thirty-first, eighteen hundred and sixty-eight, together with the facts relative thereto, as are hereinafter provided for, and shall make an accurate return thereof to the clerk of the county in which such township or city is situated, on or before the first said day of June; and for such service shall receive ten cents for each birth and death so returned by them, to be paid by the county in which such returns are made. In the year eighteen hundred and seventy, and in each and every year thereafter, it shall be the duty of the officers above men- tioned, between the tenth day of April and the first day of June, to ascertain, by actual inquiry or otherwise, of the inhabitants thereof, the births and deaths which have occurred in their respective townships, cities, or wards, during the year ending on the last day of the preceding December, and shall make the return, and receive therefor the compensation above provided for: *Provided*, That in the city of Detroit, the duties required by this act to be performed by supervisors and assess-ors shall be performed by persons appointed by the common council, for that purpose; and it shall be the duty of the com- mon council on or before the tenth day of April, in each year, to appoint such number of persons in each ward of said city as shall be necessary to perform said duties within the time lim- ited by this act; and such persons shall possess all the authority conferred upon, and perform all the duties required of super- visors and assessors, by this act, within the territory assigned them, respectively by the common council, and shall receive such compensation for their services, not exceeding the sum allowed by this act to supervisors and assessors, as shall be

*See Act No. 128, Laws of 1867, printed herewith, for registration of marriages.

fixed by the common council, to be paid by the county of Wayne, and shall be liable to the same penalties for refusal or neglect to perform any of said duties.

(859.) SEC. 2. Every justice of the peace, minister of the gospel, and all other persons authorized by law to solemnize marriages in this State, shall make a record of each marriage so solemnized by him, and every clerk or keeper of the records of the meetings in which any marriage among the Friends or Quakers shall be solemnized, shall make a record of such marriage, together with all the facts relating to the same, as required by the third section of this act; and such justice, minister of the gospel, clerk, or other person, shall, at the time such marriage is solemnized, deliver, on demand, to either of the parties so joined in marriage, as aforesaid, a certificate of such marriage, containing all the facts in relation thereto, required by said third section of this act, and shall, within ninety days thereafter, deliver to the clerk of the county in which such marriage took place, a certified copy of such record, and, at the same time, pay to the clerk twenty-five cents for recording the same.^a

(860.) SEC. 3. It shall be the duty of the county clerks of the several counties in this State, on receiving the returns of such births, marriages, and deaths, to record the same at length in separate books, to be provided at the expense of the State by the Secretary of State, for that purpose, with proper indexes thereto. The births, marriages, and deaths shall be numbered and recorded in the order in which they are received by the clerk, and the record of marriages shall be indexed, using both the name of the bridegroom and bride. The record of birth shall state, in separate columns, the date of the birth, the name of the child (if it have any), the sex and color of the child, the place of birth, the christian and surname of both parents, the residence and nativity of the parents, the occupation of the father, and the date when the record was made: *Provided*, That in case the child has no christian name, such name shall be obtained and reported to the county clerk in the next annual report of the supervisor or assessor, and such christian name shall be distinctly designated in such report as the christian name belonging to a child previously reported, and shall be properly entered by said county clerk, in the blank left for such christian name in his book of record; and it shall be the duty of the several county clerks, on or before the tenth day of April in each year, to give to the officers required to make the said returns, lists of such children whose christian names have not been previously reported in their respective towns, cities or wards. The record of marriages shall state, in separate columns, the date and place of marriage, the christian and surname of the bridegroom and bride, and the maiden name of the bride, if a widow, the color, age, and place of

How paid.
Penalties.

Marriages to be recorded.

Marriage of Quakers.

Certificates to be furnished.

Fee for recording.

County clerks; duties of.

Births, marriages and deaths to be numbered and indexed. Record of births shall state.

Proviso.

Record of marriages shall state.

^a The provisions of this section are undoubtedly repealed by Act 128, Laws of 1887, except so far as relates to the delivering of a certificate to either of the parties joined in a marriage.

Record of deaths shall state.	<p>birth of each, the residence of each at the time of marriage, the occupation of the bridegroom, and the name and official station of the person by or before whom they were married, the names and residences of at least two witnesses present at such marriage, and the date when such record was made.* The record of deaths shall state, in separate columns, the date of the death, the christian and surname of the deceased, the sex and color, whether married or single, the age in years, months, and days, the place of death, the disease or apparent cause of death, the nativity of the deceased, and the occupation, if any, and the names, residence of the parents, if known, and the date when such record was made. The clerks of the several counties shall annually, on or before the first day of September make and transmit to the Secretary of State, a certified copy of the records of his office, of all the births, marriages,* and deaths reported in their respective counties for the year ending December thirty-first, last preceding. And each county clerk shall receive for the record of each birth and death in his office three cents, and three cents for each birth, marriage, and death, returned by him to the Secretary of State, to be paid by the county, and shall be compensation in full for all services required by this act to be performed by him.</p>
Return of county clerk.	<p>(861.) SEC. 4. The Secretary of State shall prepare and furnish to the county clerks of the several counties in this State, blank books of suitable quality and size, with proper rulings and headings, to be used as books of records, in carrying into effect the provisions of this act. He shall also prepare and furnish blank "forms of returns," as hereinbefore specified accompanied with such instructions and explanations as may be necessary to insure uniformity in such returns, which blanks shall be forwarded to the several county clerks on or before the first day of March in each year; and the said county clerks shall deliver the same to the supervisors or assessors of the several townships, cities or wards therein, in their respective counties, on or before the tenth day of April.</p>
Compensation.	<p>(862.) SEC. 5. It shall be the duty of the Secretary of State to receive the returns made in pursuance of the third section of this act, and he shall cause the same for each year to be bound together, in one or more volumes, at the expense of the State, and make indexes thereto; and with such assistance as may be voluntarily rendered by any authorized committee appointed by the medical faculty of the University of Michigan or by any regularly authorized medical society in this State, for that purpose, he shall prepare such tabular statements, results, and deductions therefrom as will render them of practical utility, and make report thereof, annually, to the Governor of the State, which report may be ordered published and distributed in such manner as the Legislature may from time to time direct.</p>
Secretary of State shall furnish all blank books, blanks, instructions, etc.	<p>* Amended by Act 128, Laws of 1887, which see on previous pages for amended provisions.</p>
Returns to be bound and indexed.	
Secretary of State to make annual report.	

(863.) SEC. 6. Every justice of the peace, minister of the gospel, and all other persons authorized by the laws of this State to solemnize marriages, and clerks or keepers of records of the meetings in which any marriage among the Friends or Quakers shall be solemnized, who shall neglect or refuse to make a record of such marriage, or to deliver to the county clerk of the county in which the marriage took place, a certified copy of such record, or who shall refuse, on demand, to deliver to the parties to such marriage the certificate thereof, as required by section two of this act, or who shall willfully make a false or fictitious entry in his record of marriages or in the certified copy of such record delivered to the county clerk, or in the certificates of marriages delivered to the parties thereto, shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punished by fine not exceeding one hundred dollars, and in default of paying the same, shall be imprisoned in the county jail of the county in which such conviction shall be had, until said fine be paid, but not to exceed the period of ninety days.*

Neglect to keep records.

Neglect to deliver certificates.

Penalty.

(864.) SEC. 7. Every physician, surgeon, or midwife, who shall have been in attendance upon any deceased person, shall, upon application of any supervisor or assessor of the township, city, or any ward thereof, in which such death occurred, make out and deliver to such supervisor or assessor a certified statement, without fee, containing the name of the disease, or cause (if known), producing the death of such person; and any medical attendant who shall neglect or refuse to give such statement, or who shall willfully make a false statement in relation to such death, shall, for such offense be liable to pay a fine of not less than ten nor more than fifty dollars, and the costs of prosecution, which fine the said supervisor or assessor is hereby required to sue for and collect, in his official character.

Certificate of death.

Refusal to make certificate.

Penalty.

(865.) SEC. 8. It shall be the duty of each supervisor or assessor to obtain the facts in relation to births and deaths within his township, city, or any ward therein (not otherwise obtained), from the heads of families, the keepers, overseers, or superintendents of asylums, hospitals, jails, prisons, workhouses, almshouses, houses of correction and similar institutions, the keepers of hotels, public and private boarding houses, and the masters or chief officers of steamboats and sail vessels, navigating any of the waters of this State, and touching at any port of entry therein, in which such births or deaths occurred; and if either of the above named persons shall refuse to give such information, then the same shall be obtained by such supervisor or assessor from any person having a knowledge of the facts in relation to such birth or death; and if the supervisor or assessor shall have reason to believe that any person or persons willfully misrepresented or concealed any facts relative to such birth or death in his township, city, or any ward therein, which he cannot otherwise obtain, he may examine such person or persons on oath (which oath such supervisor or assessor is

Facts to be obtained by supervisor.

Refusal to furnish.

obtained under oath.

*The provisions of this section are undoubtedly repealed by Act 128, Laws of 1887, except so far as relates to the penalty for refusing to deliver to the parties to a marriage a certificate thereof.

Neglecting to answer a subpoena.	hereby empowered and authorized to administer), in relation to any birth or death within his township, city, or any ward therein, of which such person or persons may have any knowledge or information; and if any person, after being duly subpoenaed (as provided for compelling the attendance of witnesses in justices' courts), by such supervisor or assessor, for the purpose aforesaid, shall neglect or refuse to appear before such officer, or, appearing, shall refuse to be sworn and testify in relation to such matter, he shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished therefor by fine not exceeding fifty dollars, and in default of paying the same shall be imprisoned in the county jail of the county in which such conviction shall be had, until said fine be paid, but not exceeding ninety days; and any person who after being duly sworn as aforesaid, shall willfully make any false statement in relation to any birth or death, about which he is required to testify, shall be deemed guilty of willful and corrupt perjury: <i>Provided</i> , That no person shall be required to answer any question which will tend to criminate himself or herself upon any such examination.
Penalty.	
Perjury.	
proviso.	
Neglect to perform duties.	(866.) SEC. 9. In case of the refusal or neglect by any of the officers mentioned in this act, to perform any of the duties hereinbefore required of them or either of them, to be done and performed by any of the provisions herein contained, such officer shall be liable to a fine not to exceed one hundred dollars, and the costs of prosecution; and the prosecuting attorney in each county is hereby required to prosecute, in the name of the people of the State of Michigan, all persons in his county who shall willfully violate any of the provisions of this act; and the said supervisor or assessor of any township, city, or any ward therein, may be prosecuted for a misdemeanor under the section, and upon conviction, punished as therein provided for.
Penalty.	
Misdemeanor.	

SUGGESTIONS TO PERSONS AUTHORIZED TO SOLEMNIZE MARRIAGES IN MICHIGAN.

A thorough knowledge of the law concerning the solemnization and return of marriages in Michigan is necessary to a correct performance of the duties of persons authorized to solemnize marriages.

The most frequent violation of the law is in the marriage of persons *under the lawful age*, which is: for males eighteen (18) years, and for females sixteen (16) years. See Section (6209), Howell's Annotated Statutes, 1882, printed on a previous page. The penalty for the violation of this provision is a forfeit of not exceeding one hundred (100) dollars. See Sec. 6, Act 128, Laws of 1887, printed on a previous page.

In the record and return of marriages, every item specified in the law should be carefully ascertained, and correctly and plainly written. No item should be omitted, and nothing taken for granted, as is often the case with the fact as to COLOR of persons married.

In recording the BIRTHPLACE of each, the State or country should be distinctly given in each case. This will avoid the difficulty of ascertaining the nativity of persons whose birthplace is returned "Holland," "Hanover," "Denmark," "Wales," "Paris," etc.,—names of places which may be either in the United States or Europe. If such or similar names occur, please state whether it is Holland, *Michigan*, or Holland, *Europe*, and so for each case. Never return the birthplace "America," as we cannot know whether it is in the United States, and are therefore compelled to compile it with the "Unkown."

Blanks for the return of marriages to the county clerk will not be required under the new law, as the return of the license with the certificate properly filled out will constitute the proper return to the county clerk.

The license to marry can only be procured from the several county clerks, but the affidavit necessary to procure the same may be made before any person authorized to administer oaths, and blank affidavits can be had from any county clerk or from the office of the Secretary of State.

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